## <213> Homo sapiens

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Asn	Pro	Arg		Pro	Leu	Gly	Pro		Pro	Val	Arg	Pro		Pro	GIA
			820	_	_			825					830		_
Pro	Glu		Ser	Ala	Gln	Pro		Pro	Gly	Pro	Val		Gln	Val	Leu
	_	835					840	_	_			845	_	_	
Pro		Ser	Leu	Met	Val		Ala	Ser	Pro	Ala		Pro	Pro	Leu	He
	850					855			_	_	860	_	_		_
	Ala	Ser	Arg	Pro		Gly	Pro	Val	Leu	Leu	Pro	Pro	Leu	GIn	
865					870	_	_			875	_				880
Asn	Ser	Gly	Ser		Pro	Gln	Val	Leu		Ser	Pro	Leu	Gly		Leu
				885					890		_	_	_	895	
Ser	Gly	Thr		Arg	Pro	Pro	Thr		Thr	Leu	Ser	Leu		Pro	Thr
•			900	_				905	_	_	_	_	910	_	_
Pro	Pro		Pro	Val	Arg	Leu		Pro	Ala	Pro	Pro		GIŸ	Pro	Ser
		915			_		920	_	_		_	925		_	_
Ser		Leu	Lys	Pro	Leu		Val	Pro	Pro	Gly	_	Thr	Phe	Pro	Pro
_	930					935				_ •	940				
	Ala	Ala	Thr	Thr		Ser	Thr	Thr	Thr	Ala	Thr	Ala	Thr	Thr	
945					950			_		955			_	_	960
Ala	Val	Pro	Ala		Thr	Pro	Ala	Pro		Arg	Leu	Ile	Leu		Pro
		_	_	965			_		970	·	<b>-</b>	_		975	
Asp	Met	Gln		Arg	Leu	Pro	Ser		Glu	Val	Val	Ser		GIĄ	GIn
	_		980			_	_	985					990	_	_
Leu	Ala		Leu	Ala	Gln	Arg			Ala	Asn	Ala			ser	Lys
		995					1000		_	_		1009		~-	
Pro			Phe	Gln	Ile		_	Asn	Lys	Leu			Thr	GIY	Ala
_	1010			_		1019			_	_	1020				_
		Arg	Gln	Leu			GIY	Gin	Pro	Arg		Leu	Gin	мес	
1029				_	1030		~1			1039		11- 1	*** 1		1040
Pro	Thr	Met	Val			Thr	GIY	Val			TIE	Val	vai		Gln
	_	_	_	1049			_		1050				<b>5</b>	1055	
Ala	Pro	Arg			Leu	Thr	Pro			Pro	Leu	Ата			Pro
			1060			_	_	1069		_	_	_	1070		
Arg	Pro			Ser	Gly	Leu			Val	Leu	Asn			Pro	Thr
		1079				_	1080			_		1089		_	
Leu			Gly	Arg	Leu			Pro	Thr	Leu			Ala	Arg	Ala
	1090					1095					1100				
Pro	Met	Pro	Thr	Pro			Val	Arg	Pro	Leu		Lys	Leu	Val	
1109					1110					1115		_			1120
Ser	Pro	Ser	Pro	Glu	Val	Ser	Ala	Ser		Pro	Gly	Ala	Ala		
										-					
				1125					1130					1135	
Thr		Ser	Ser			His	Val		Ser	Ser	Leu	Pro		Pro	
	Ile		1140	Pro	Leu			1145	Ser				1150	Pro	Ala

		1155	5				1160	)				1165	;		
Ser	Ser 1170		Val	Ser	Val	Pro 1175		Ser	Ser	Ser	Leu 1180		Ile	Ser	Val
Pro	Thr	Thr	Leu	Pro	Ala	Pro	Ala	Ser	Ala	Pro	Leu	Thr	Ile	Pro	Ile
1185	5				1190	)				1195	5				1200
Ser	Ala	Pro	Leu	Thr 1205		Ser	Ala	Ser	Gly 1210		Ala	Leu	Leu	Thr 1215	
Val	Thr	Pro	Pro 1220		Ala	Pro	Val	Val 1225		Ala	Ala	Pro	Gly 1230		Pro
Ser	Leu	Ala 1235		Ser	Gly	Ala	Ser 1240		Ser	Ala	Ser	Ala 1245		Thr	Leu
Gly	Leu 1250	Ala		Ala	Pro	Ser 1255	Leu		Ser	Ser	Gln 1260		Pro	Gly	His
Dro			T 011	ת ב	Dro			Sar	Hie	Va 1			Len	Δen	Ser
1265		neu	neu	AIG	1270		Ser	JCI		1279		CI	200		1280
Thr	Val	Ala	Pro	Ala	Cys	Ser	Pro	Val	Leu	Val	Pro	Ala	Ser	Ala	Leu
														1295	
Ala	Ser	Pro	Phe 1300		Ser	Ala	Pro	Asn 1305		Ala	Pro	Ala	Gln 1310		Ser
Leu	Leu	Ala 1315		Ala	Ser	Ser				Ala		Ala 1325		Pro	Leu
Ala	Pro	Met	Ala	Ala	Pro	Gln	Thr	Ala	Ile	Leu	Ala	Pro	Ser	Pro	Ala
	1330	)				1335	5				1340	)			
Pro	Pro	Leu	Ala	Pro	Leu	Pro	Val	Leu	Ala	Pro	Ser	Pro.	Gly	Ala	Ala
1345	5				1350	)				1355	5				1360
Pro	Val	Leu	Ala	Ser 1369		Gln	Thr			Pro		Met	Ala	Pro 1375	
Ser	Thr	Pro		Thr		Leu	Ala		Ala			Val	Pro 1390		Pro
Thr	Pro	Val				Ser		Thr	Gln		Met		Pro		Pro
		1395						)				1405			
Val	Pro	Ser	Pro	Leu	Pro	Ser	Pro	Ala	Ser	Thr			Leu	Ala	Leu
	1410					1415					1420			_	
Ala	Pro	Ala	Leu	Ala	Pro	Thr	Leu	Gly	-			Pro	Ser		Thr
1425					1430					1435					1440
Leu	Ser	Leu	Gly	Thr 1445		Asn	Pro	Gln	Gly 1450		Phe	Pro	Thr	Gln 1455	
Leu	Ser	Leu	Thr	Pro	Ala	Ser	Ser	Leu	Val	Pro	Thr	Pro	Ala	Gln	Thr
			1460					1465					1470		
Leu	Ser	Leu 1475		Pro	Gly	Pro	Pro 1480		Gly	Pro	Thr	Gln 1485		Leu	Ser
Leu		Pro		Pro	Pro		Ala		Ala	Ser		Val		Pro	Ala
	1490		_			1495		_		_	1500				_
Pro 1505		His	Thr	Leu	Thr 1510		Ala	Pro	Ala	Ser 1515		Ser	Ala	Ser	Leu 1520
Leu	Ala	Pro	Ala	Ser 1529		Gln	Thr	Leu	Thr 1530		Ser	Pro	Ala	Pro 1535	
Pro	Thr	Leu		Pro		Ala	Ala		Thr		Ala	Leu		Pro	
<b>~</b>	mb	<b>~</b> 1	1540			O =	<b>a</b> 1 -	1545		C ====	T	37-7	1550		A 1 -
ser	inr	Gin 1555		Pro	нιа	Ser	1560		ser	ser	ьeu	va1 1565		aeI	WIG
Ser	Gly 1570		Ala	Pro	Leu	Pro 1575		Thr	Met	Val	Ser 1580		Leu	Pro	Val
C ~ ~			Glu	Pro	Asn			Thr	Leu	ΔΫσ			Pro	Pro	Ser

1585		1590			5		_	_	1600
Pro Pro Ser			Phe Gly		Arg	Pro	Arg		
	160			1610		<b>.</b>	_	1615	
Pro Pro Pro		Arg Ser			Asp				GIU
,	1620	_	162				1630		•
Lys Arg Lys		Arg Ser		Leu Giu	Arg	1645		GIN	Leu
163		.1 - T	1640		~1			37 a 1	T 011
Ser Glu Ala	HIS GIY			var Tyr	1660		GIU	Val	Leu
1650 Asp Phe Cys	Mhas Tass	1659	-	Ala Car			Clv	Dro	Ara
_	Thr Leu		Pro vai	. Ala Sel 167		116	GIY	PIO	1680
1665 Ser Pro Gly	Dwa Cam	1670	Thr Dhe			Thr	Glu	Δla	
Ser Pro Gry	168		IIIL PIIC	1690	- 7-	1111	014	1695	
His Arg Ala			Gln Glr		Asp	Gln	Leu		
nis Alg Ala	1700	1110 110	170				1710		
Ile Ile Glu		Tle Phe			Val				Pro
171			1720			1725			
Pro Ser Leu		Cvs His		Pro Tr	Leu	Ala	Pro	Arg	Gln
1730		1739		•	1740			_	
Ala Ala Phe	Gln Glu	Gln Leu	Ala Sei	Glu Leu	Trp	Pro	Arg	Ala	Arg
1745		1750		175			_		1760
Pro Leu His	Arg Ile	Val Cys	Asn Met	Arg Thr	Gln	Phe	Pro	Asp	Leu
	176			1770				1775	
Arg Leu Ile	Gln Tyr	Asp Cys	Gly Lys	Leu Glr	Thr	Leu	Ala	Val	Leu
	1780		178				1790		
Leu Arg Gln	Leu Lys	Ala Glu	Gly His	Arg Val	Leu	Ile	Phe	Thr	Gln
170	=		1800			1805			
179									_
Met Thr Arg		Asp Val		ı Gln Phe		Thr		His	Gly
Met Thr Arg 1810	Met Leu	181	Leu Gli		1820	Thr	Tyr		
Met Thr Arg 1810 His Leu Tyr	Met Leu	181 Leu Asp	Leu Gli	Thr Arg	1820 Val	Thr	Tyr		Gln
Met Thr Arg 1810 His Leu Tyr 1825	Met Leu Leu Arg	1819 Leu Asp 1830	Leu Glu 5 Gly Sei	Thr Arg	1820 7 Val 85	Thr ) Glu	Tyr Gln	Arg	Gln 1840
Met Thr Arg 1810 His Leu Tyr	Met Leu Leu Arg Glu Arg	1819 Leu Asp 1830 Phe Asn	Leu Glu 5 Gly Sei	Thr Arg 183 Lys Arg	1820 7 Val 85	Thr ) Glu	Tyr Gln	Arg Phe	Gln 1840 Ile
Met Thr Arg 1810 His Leu Tyr 1825 Ala Leu Met	Met Leu Leu Arg Glu Arg 184	1819 Leu Asp 1830 Phe Asn 5	Leu Glu 5 Gly Sei Ala Asp	Thr Arg 183 Lys Arg 1850	1820   Val  5   Ile	Thr Glu Phe	Tyr Gln Cys	Arg Phe 1855	Gln 1840 Ile
Met Thr Arg 1810 His Leu Tyr 1825	Met Leu Leu Arg Glu Arg 184 Arg Ser	1819 Leu Asp 1830 Phe Asn 5	Leu Glu 5 Gly Sei Ala Asp Val Gly	Thr Arg 183 Lys Arg 1850 Val Asr	1820   Val  5   Ile	Thr Glu Phe	Tyr Gln Cys Gly	Arg Phe 1855 Ala	Gln 1840 Ile
Met Thr Arg 1810 His Leu Tyr 1825 Ala Leu Met Leu Ser Thr	Met Leu Leu Arg Glu Arg 184 Arg Ser 1860	181: Leu Asp 1830 Phe Asn 5 Gly Gly	Leu Glu 5 Gly Sen Ala Asp Val Gly 186	Thr Arg 183 Lys Arg 1850 Val Asr	1820 y Val 35 y Ile n Leu	Thr Glu Phe Thr	Tyr Gln Cys Gly 1870	Arg Phe 1855 Ala	Gln 1840 Ile Asp
Met Thr Arg 1810 His Leu Tyr 1825 Ala Leu Met Leu Ser Thr	Met Leu Leu Arg Glu Arg 184 Arg Ser 1860 Phe Tyr	181: Leu Asp 1830 Phe Asn 5 Gly Gly	Leu Glu  Gly Sen  Ala Asp  Val Gly  186  Asp Try	Thr Arg 183 Lys Arg 1850 Val Asr	1820 y Val 35 y Ile n Leu	Thr Glu Phe Thr	Tyr Gln Cys Gly 1870 Asp	Arg Phe 1855 Ala	Gln 1840 Ile Asp
Met Thr Arg 1810 His Leu Tyr 1825 Ala Leu Met Leu Ser Thr Thr Val Val 187	Met Leu Leu Arg Glu Arg 184 Arg Ser 1860 Phe Tyr	181: Leu Asp 1830 Phe Asn 5 Gly Gly Asp Ser	Leu Glu  Gly Ser  Ala Asp  Val Gly  186  Asp Try  1880	Thr Arg 183 Lys Arg 1850 Val Asr 55 Asn Pro	1820 Val S5 Tle Leu	Thr Glu Phe Thr Met 1885	Tyr Gln Cys Gly 1870 Asp	Arg Phe 1855 Ala Ala	Gln 1840 Ile Asp Gln
Met Thr Arg 1810 His Leu Tyr 1825 Ala Leu Met Leu Ser Thr Thr Val Val 187 Ala Gln Asp	Met Leu Leu Arg Glu Arg 184 Arg Ser 1860 Phe Tyr	181: Leu Asp 1830 Phe Asn 5 Gly Gly Asp Ser	Leu Glu  Gly Sen  Ala Asp  Val Gly  186  Asp Tru  1880  Ile Gly	Thr Arg 183 Lys Arg 1850 Val Asr 55 Asn Pro	1820 y Val 15 y Ile 1 Leu 2 Thr	Thr Glu Phe Thr Met 1885	Tyr Gln Cys Gly 1870 Asp	Arg Phe 1855 Ala Ala	Gln 1840 Ile Asp Gln
Met Thr Arg 1810 His Leu Tyr 1825 Ala Leu Met Leu Ser Thr Thr Val Val 187 Ala Gln Asp 1890	Met Leu Leu Arg Glu Arg 184 Arg Ser 1860 Phe Tyr 5 Arg Cys	181: Leu Asp 1830 Phe Asn 5 Gly Gly Asp Ser His Arg 189:	Leu Glu  Gly Sen  Ala Asp  Val Gly  186  Asp Tru  1880  Ile Gly  5	Thr Arg 183 1850 Val Asr 55 Asn Pro	1820 y Val 35 y Ile 1 Leu 2 Thr 1 Arg 1900	Thr Glu Phe Thr Met 1885 Asp	Tyr Gln Cys Gly 1870 Asp Val	Arg Phe 1855 Ala Ala His	Gln 1840 Ile S Asp Gln
Met Thr Arg 1810 His Leu Tyr 1825 Ala Leu Met Leu Ser Thr Thr Val Val 187 Ala Gln Asp 1890 Tyr Arg Leu	Met Leu Leu Arg Glu Arg 184 Arg Ser 1860 Phe Tyr 5 Arg Cys	181: Leu Asp 1830 Phe Asn 5 Gly Gly Asp Ser His Arg 189: Glu Arg	Leu Glu  Gly Sen  Ala Asp  Val Gly  186  Asp Tru  1880  Ile Gly  5	Thr Arg 183 1850 Val Asr 55 Asn Pro	1820 Val SS Tle Leu Thr Arg 1900	Thr Glu Phe Thr Met 1885 Asp	Tyr Gln Cys Gly 1870 Asp Val	Arg Phe 1855 Ala Ala His	Gln 1840 Ile S Asp Gln
Met Thr Arg 1810 His Leu Tyr 1825 Ala Leu Met Leu Ser Thr Thr Val Val 187 Ala Gln Asp 1890 Tyr Arg Leu 1905	Met Leu Leu Arg Glu Arg 184 Arg Ser 1860 Phe Tyr Arg Cys Ile Ser	Leu Asp 1830 Phe Asn 5 Gly Gly Asp Ser His Arg 1899 Glu Arg 1910	Leu Glu  Gly Sen  Ala Asp  Val Gly  186  Asp Trp  1880  Ile Gly  Thr Val	Thr Arg 183 2 Lys Arg 1850 7 Val Asr 55 2 Asn Pro 7 Gln Thr	1820 y Val 35 y Ile 1 Leu 2 Thr 2 Arg 1900 1 Asn	Thr Glu Phe Thr Met 1885 Asp	Tyr Gln Cys Gly 1870 Asp Val Leu	Phe 1855 Ala Ala His	Gln 1840 Ile S Asp Gln Ile Lys 1920
Met Thr Arg 1810 His Leu Tyr 1825 Ala Leu Met Leu Ser Thr Thr Val Val 187 Ala Gln Asp 1890 Tyr Arg Leu	Met Leu Leu Arg Glu Arg 184 Arg Ser 1860 Phe Tyr Arg Cys Ile Ser	Leu Asp 1830 Phe Asn 5 Gly Gly Asp Ser His Arg 189 Glu Arg 1910 Met Leu	Leu Glu  Gly Sen  Ala Asp  Val Gly  186  Asp Trp  1880  Ile Gly  Thr Val	Thr Arg 183 2 Lys Arg 1850 7 Val Asr 55 2 Asn Pro 7 Gln Thr	1820 y Val 35 y Ile 1 Leu 2 Thr 2 Arg 1900 1 Asn	Thr Glu Phe Thr Met 1885 Asp	Tyr Gln Cys Gly 1870 Asp Val Leu	Phe 1855 Ala Ala His	Gln 1840 Ile S Asp Gln Ile Lys 1920 Asn
Met Thr Arg 1810 His Leu Tyr 1825 Ala Leu Met Leu Ser Thr Thr Val Val 187 Ala Gln Asp 1890 Tyr Arg Leu 1905 Ala Asn Gln	Met Leu Leu Arg Glu Arg 184 Arg Ser 1860 Phe Tyr Arg Cys Ile Ser Lys Arg 192	181: Leu Asp 1830 Phe Asn 5 Gly Gly Asp Ser His Arg 189: Glu Arg 1910 Met Leu 5	Leu Glu Gly Sen Ala Asp Val Gly 186 Asp Tru 1880 Ile Gly 5 Thr Val	Thr Arg 183 2 Lys Arg 1850 7 Val Asr 55 2 Asn Pro 7 Gln Thr 1 Glu Glu 191 2 Met Ala 1930	1820 y Val 35 y Ile 1 Leu 2 Thr 1900 1 Asn 15	Thr Glu Phe Thr Met 1885 Asp Ile Glu	Tyr Gln Cys Gly 1870 Asp Val Leu Gly	Phe 1855 Ala Ala His Lys Gly 1935	Gln 1840 Ile S Asp Gln Ile Lys 1920 Asn
Met Thr Arg 1810 His Leu Tyr 1825 Ala Leu Met Leu Ser Thr Thr Val Val 187 Ala Gln Asp 1890 Tyr Arg Leu 1905	Met Leu Leu Arg Glu Arg 184 Arg Ser 1860 Phe Tyr Arg Cys Ile Ser Lys Arg 192	181: Leu Asp 1830 Phe Asn 5 Gly Gly Asp Ser His Arg 189: Glu Arg 1910 Met Leu 5	Leu Glu Gly Sen Ala Asp Val Gly 186 Asp Tru 1880 Ile Gly 5 Thr Val	Thr Arg 183 2 Lys Arg 1850 7 Val Asr 55 2 Asn Pro 7 Gln Thr 1 Glu Glu 197 2 Met Ala 1930 1 Thr Ile	1820 y Val 35 y Ile 1 Leu 2 Thr 1900 1 Asn 15	Thr Glu Phe Thr Met 1885 Asp Ile Glu	Tyr Gln Cys Gly 1870 Asp Val Leu Gly	Phe 1855 Ala Ala His Lys Gly 1935 Phe	Gln 1840 Ile S Asp Gln Ile Lys 1920 Asn
Met Thr Arg 1810 His Leu Tyr 1825 Ala Leu Met Leu Ser Thr Thr Val Val 187 Ala Gln Asp 1890 Tyr Arg Leu 1905 Ala Asn Gln Phe Thr Thr	Met Leu Leu Arg Glu Arg 184 Arg Ser 1860 Phe Tyr 5 Arg Cys Ile Ser Lys Arg 192 Ala Tyr 1940	Leu Asp 1830 Phe Asn 5 Gly Gly Asp Ser His Arg 189 Glu Arg 1910 Met Leu 5 Phe Lys	Leu Glu  Gly Sen  Ala Asp  Val Gly  186  Asp Tru  1880  Ile Gly  Thr Val  Gly Asp  Gln Glu  194	Thr Arg 183 2 Lys Arg 1850 7 Val Asr 55 2 Asn Pro 7 Gln Thr 1 Glu Glu 197 2 Met Ala 1930 1 Thr Ile	1820 (Val) (S) (Jan)	Thr Glu Phe Thr Met 1885 Asp Ile Glu Glu	Tyr Gln Cys Gly 1870 Asp Val Leu Gly Leu 1950	Phe 1855 Ala Ala His Lys Gly 1935 Phe	Gln 1840 Ile Asp Gln Ile Lys 1920 Asn Asp
Met Thr Arg 1810 His Leu Tyr 1825 Ala Leu Met Leu Ser Thr Thr Val Val 187 Ala Gln Asp 1890 Tyr Arg Leu 1905 Ala Asn Gln	Met Leu Leu Arg Glu Arg 184 Arg Ser 1860 Phe Tyr 5 Arg Cys Ile Ser Lys Arg 192 Ala Tyr 1940 Glu Glu	Leu Asp 1830 Phe Asn 5 Gly Gly Asp Ser His Arg 189 Glu Arg 1910 Met Leu 5 Phe Lys	Leu Glu  Gly Sen  Ala Asp  Val Gly  186  Asp Tru  1880  Ile Gly  Thr Val  Gly Asp  Gln Glu  194	Thr Arg 183 2 Lys Arg 1850 7 Val Asr 55 2 Asn Pro 7 Gln Thr 1 Glu Glu 197 2 Met Ala 1930 1 Thr Ile	1820 (Val) (S) (Jan)	Thr Glu Phe Thr Met 1885 Asp Ile Glu Glu	Tyr Gln Cys Gly 1870 Asp Val Leu Gly Leu 1950 Ala	Phe 1855 Ala Ala His Lys Gly 1935 Phe	Gln 1840 Ile Asp Gln Ile Lys 1920 Asn Asp
Met Thr Arg 1810 His Leu Tyr 1825 Ala Leu Met Leu Ser Thr Thr Val Val 187 Ala Gln Asp 1890 Tyr Arg Leu 1905 Ala Asn Gln Phe Thr Thr	Met Leu Leu Arg Glu Arg 184 Arg Ser 1860 Phe Tyr 5 Arg Cys Ile Ser Lys Arg 192 Ala Tyr 1940 Glu Glu	Leu Asp 1830 Phe Asn 5 Gly Gly Asp Ser His Arg 1890 Glu Arg 1910 Met Leu 5 Phe Lys	Leu Glu  Gly Sen  Ala Asp  Val Gly  1860  Ile Gly  Thr Val  Gly Asp  Gln Gln  194  Ser Sen  1960	Thr Arg 183 1850 Val Asr 55 Asn Pro Gln Thr 1 Glu Glu 1930 Met Ala 1930 1 Thr Ile	1820 Val SS Ile Leu Thr Arg 1900 Asn S Ile Arg	Thr Glu Phe Thr 1885 Asp Ile Glu Glu Ser 1965	Tyr Gln Cys Gly 1870 Asp Val Leu Gly Leu 1950 Ala	Phe 1855 Ala Ala His Lys Gly 1935 Phe	Gln 1840 Ile Asp Gln Ile Lys 1920 Asn Asp Glu
Met Thr Arg 1810 His Leu Tyr 1825 Ala Leu Met Leu Ser Thr Thr Val Val 187 Ala Gln Asp 1890 Tyr Arg Leu 1905 Ala Asn Gln Phe Thr Thr Met Pro Leu 195 Glu Glu Glu 1970	Met Leu Leu Arg Glu Arg 184 Arg Ser 1860 Phe Tyr Arg Cys Arg Cys Lys Arg 192 Ala Tyr 1940 Glu Glu 5 Glu Thr	181: Leu Asp 1830 Phe Asn 5 Gly Gly Asp Ser His Arg 189: Glu Arg 1910 Met Leu Phe Lys Pro Ser Val Ala 197:	Leu Glu  Gly Sen  Ala Asp  Val Gly  1880  Ile Gly  Thr Val  Gly Asp  Gln Gln  Ser Sen  1960  Ser Lys	Thr Arg 183 2 Lys Arg 1850 7 Val Asr 5 Asn Pro 7 Gln Thr 1 Glu Glu 1930 1 Thr Ile 15 5 Ser Val	1820 y Val 35 y Ile 1 Leu 2 Thr 1 Arg 1900 1 Asn 15 1 Ile 2 Arg 2 Pro 3 His 1980	Thr Glu Phe Thr 1885 Asp Ile Glu Glu Ser 1965 Ile	Gln Cys Gly 1870 Asp Val Leu Gly Leu 1950 Ala	Phe 1855 Ala Ala His Lys Gly 1935 Phe Pro	Gln 1840 Ile 6 Asp Gln Ile Lys 1920 Asn 6 Asp Glu Gln
Met Thr Arg 1810  His Leu Tyr 1825  Ala Leu Met  Leu Ser Thr  Thr Val Val 187  Ala Gln Asp 1890  Tyr Arg Leu 1905  Ala Asn Gln  Phe Thr Thr  Met Pro Leu 195  Glu Glu Glu	Met Leu Leu Arg Glu Arg 184 Arg Ser 1860 Phe Tyr Arg Cys Arg Cys Lys Arg 192 Ala Tyr 1940 Glu Glu 5 Glu Thr	181: Leu Asp 1830 Phe Asn 5 Gly Gly Asp Ser His Arg 189: Glu Arg 1910 Met Leu Phe Lys Pro Ser Val Ala 197:	Leu Glu  Gly Sen  Ala Asp  Val Gly  1880  Ile Gly  Thr Val  Gly Asp  Gln Gln  Ser Sen  1960  Ser Lys	Thr Arg 183 2 Lys Arg 1850 7 Val Asr 55 2 Asn Pro 7 Gln Thr 1 Glu Glu 191 2 Met Ala 1930 2 Thr Ile 15 5 Ser Val 6 Gln Thr	1820 y Val 155 y Ile 1 Leu 1 Thr 1 Arg 1900 1 Asn 15 1 Ile 2 Arg 1 Pro 1 His 1980 2 Arg	Thr Glu Phe Thr 1885 Asp Ile Glu Glu Ser 1965 Ile	Gln Cys Gly 1870 Asp Val Leu Gly Leu 1950 Ala	Phe 1855 Ala Ala His Lys Gly 1935 Phe Pro	Gln 1840 Ile 6 Asp Gln Ile Lys 1920 Asn 6 Asp Glu Gln
Met Thr Arg 1810 His Leu Tyr 1825 Ala Leu Met Leu Ser Thr Thr Val Val 187 Ala Gln Asp 1890 Tyr Arg Leu 1905 Ala Asn Gln Phe Thr Thr Met Pro Leu 195 Glu Glu Glu 1970 Ala Leu Cys 1985	Met Leu Leu Arg Glu Arg 184 Arg Ser 1860 Phe Tyr Arg Cys Ile Ser Lys Arg 192 Ala Tyr 1940 Glu Glu Glu Glu Thr Arg Ala	181: Leu Asp 1830 Phe Asn 5 Gly Gly Asp Ser His Arg 189: Glu Arg 1910 Met Leu 5 Phe Lys Pro Ser Val Ala 197: Glu Asp 1990	Leu Glu  Gly Sen  Ala Asp  Val Gly  1860  Ile Gly  5  Thr Val  Gly Asp  Gln Glu  1960  Ser Lys  5  Glu Glu	Thr Arg 183 0 Lys Arg 1850 7 Val Asr 65 0 Asn Pro 7 Gln Thr 1 Glu Glu 191 0 Met Ala 1930 1 Thr Ile 15 5 Ser Val 6 Gln Thr	1820 (Val (S) (I) I Leu (I) Thr (I) Arg (I) 1900 (I) Asn (I) S (I) I Leu (I) Pro (I) Pro (	Thr Glu Phe Thr 1885 Asp Ile Glu Glu Ser 1965 Ile Ala	Gln Cys Gly 1870 Asp Val Leu Gly Leu 1950 Ala Leu Ala	Phe 1855 Ala Ala His Lys Gly 1935 Phe Pro Glu	Gln 1840 Ile S Asp Gln Ile Lys 1920 Asn Glu Gln Gln 2000
Met Thr Arg 1810  His Leu Tyr 1825 Ala Leu Met  Leu Ser Thr  Thr Val Val 187 Ala Gln Asp 1890  Tyr Arg Leu 1905 Ala Asn Gln  Phe Thr Thr  Met Pro Leu 195 Glu Glu Glu 1970 Ala Leu Cys	Met Leu Leu Arg Glu Arg 184 Arg Ser 1860 Phe Tyr Arg Cys Ile Ser Lys Arg 192 Ala Tyr 1940 Glu Glu Glu Glu Thr Arg Ala	181: Leu Asp 1830 Phe Asn 5 Gly Gly Asp Ser His Arg 189: Glu Arg 1910 Met Leu 5 Phe Lys Pro Ser Val Ala 197: Glu Asp 1990	Leu Glu  Gly Sen  Ala Asp  Val Gly  1860  Ile Gly  5  Thr Val  Gly Asp  Gln Glu  1960  Ser Lys  5  Glu Glu	Thr Arg 183 2 Lys Arg 1850 7 Val Asr 55 2 Asn Pro 7 Gln Thr 1 Glu Glu 191 2 Met Ala 1930 2 Thr Ile 155 3 Ser Val 3 Gln Thr 1 Asp Ile 199 1 Ala Glu	1820 (Val (S) (I) I Leu (I) Thr (I) Arg (I) 1900 (I) Asn (I) S (I) I Leu (I) Pro (I) Pro (	Thr Glu Phe Thr 1885 Asp Ile Glu Glu Ser 1965 Ile Ala	Gln Cys Gly 1870 Asp Val Leu Gly Leu 1950 Ala Leu Ala	Arg Phe 1855 Ala Ala His Lys Gly 1935 Phe Pro Glu Thr	Gln 1840 Ile S Asp Gln Ile Lys 1920 Asn Glu Gln Gln 2000 Asp
Met Thr Arg 1810 His Leu Tyr 1825 Ala Leu Met Leu Ser Thr Thr Val Val 187 Ala Gln Asp 1890 Tyr Arg Leu 1905 Ala Asn Gln Phe Thr Thr Met Pro Leu 195 Glu Glu Glu 1970 Ala Leu Cys 1985	Met Leu Leu Arg Glu Arg 184 Arg Ser 1860 Phe Tyr Arg Cys Ile Ser Lys Arg 192 Ala Tyr 1940 Glu Glu Glu Glu Glu Thr Arg Ala Glu Gln 200	181: Leu Asp 1830 Phe Asn 5 Gly Gly Asp Ser His Arg 189: Glu Arg 1910 Met Leu 5 Phe Lys Pro Ser Val Ala 197: Glu Asp 1990 Val Ala 5	Leu Glu  Gly Sen  Ala Asp  Val Gly  186  Asp Trp  1880  Ile Gly  Thr Val  Gly Asp  Gln Gln  Ser Sen  1960  Ser Lyn  Glu Glu  Glu Leu  Glu Leu	Thr Arg 183 0 Lys Arg 1850 7 Val Asr 55 0 Asn Pro 7 Gln Thr 1 Glu Glu 191 0 Met Ala 1930 1 Thr Ile 155 5 Ser Val 6 Gln Thr 1 Asp Ile 199 1 Ala Glu 2010	1820 (Val) (S) (I) Ile (I) Leu (I) Thr (I) Asn (I)	Thr Glu Phe Thr 1885 Asp Ile Glu Glu Ser 1965 Ile Ala Asn	Tyr Gln Cys Gly 1870 Asp Val Leu Gly Leu 1950 Ala Leu Ala Glu	Arg Phe 1855 Ala Ala His Lys Gly 1935 Phe Pro Glu Thr Asn 2015	Gln 1840 Ile S Asp Gln Ile Lys 1920 Asn Gln Gln Gln 2000 Asp

					2025					2030		
	2020				2025							Clu
Asp Glu Glu 203		r Arg A		31u ( 2040	GIN	GIU	Tie		AIA 2045		vai	GIU
Gln Leu Thi	. D T]	. (1)			. Γ.	Mot	Lve				Ala	Ser
	PIO 11		2055	ıyı A	MIG	Mec	<i>-</i>	2060				
2050				~1			C1 n			Glu	Gln	Va 1
Leu Glu Glu	. val se			JLU.	Leu				GIU	GIU	Gili	2080
2065		2070					2075			1	Db.	
Glu Ala Ala	Arg Ly	s Asp 1	Leu A	Asp (					GIU	vaI.	Pne	Arg
	20						_				2095	
Leu Pro Gli	Glu Gl	u Glu (	Glu (	Gly :	Pro	Gly	Ala	Gly				Ser
	2100				2105					2110		
Cys Gly Thi	Gly Gl	y Gly '	Thr 1	His .	Arg	Arg	Ser	Lys	Lys	Ala	Lys	Ala
211	.5			2120					2125			
Pro Glu Arg	Pro Gl	y Thr	Arg '	Val .	Ser	Glu	Arg	Leu	Arg	Gly	Ala	Arg
2130			2135					2140				
Ala Glu Thi	Gln Gl	y Ala i	Asn l	His '	Thr	Pro	Val	Ile	Ser	Ala	His	Gln
2145		2150					2155					2160
Thr Arg Sei	Thr Th			Pro .	Arg	Cvs	Ser	Pro	Ala	Arg	Glu	Arg
int are per	21					2170				_	2175	
Val Pro Arg			Ara	Pro				Pro	Ala	Ser	Ala	Pro
Val PIO AIG		a FIO	Arg .		719 2185					2190		
Ala Ala Ile	2180	- Tou '	v-1				Val	Car	Δla			Pro
		a Leu		2200		PLO	vai	JCI	2205			
219						T	Dwo	17-1			T.Att	Pro
Ile Ser Ala	Pro As				TTE	Leu	PIO			116	neu	110
2210			2215		_		<b>~</b>	2220		D	71-	C++0
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Leu Pro Leu Gln 545 Val Ser Asp	Val His Leu 530 His Asn Gln Ala Ser 610	Asn Leu 515 Pro Phe Glu Leu Gly 595 Thr	Gln 500 Lys Pro Val Val Ser 580 Glu	485 His Ser Ser Met Arg 565 Asp Ala Ser	Pro Pro Val 550 Ala Ser Glu Arg	Ser Ser 535 Glu Leu Gly Ala Ser 615	Gly Ala 520 Gly Val Pro Gln Ser 600 Ser	Pro 505 Glu His His Gln Thr 585 Ala Lys	490 Phe Ala Pro Arg Thr 570 Leu Pro Glu	Pro Thr Asp Pro 555 Arg Ser Gly Leu	Arg Val Gln 540 Asp Thr Glu Arg Pro 620	Val Ala 525 Thr Ser Ala Asp Gly 605 Arg	Gln 510 Gly Glu Ser Ser 590 Arg	495 Ser Gly Thr Pro Thr 575 Gly Gln Glu	Pro Cys Asn Asp 560 Leu Val Ser
Leu Pro Leu Gln 545 Val Ser Asp Val Pro	Val His Leu 530 His Asn Gln Ala Ser 610	Asn Leu 515 Pro Phe Glu Leu Gly 595 Thr	Gln 500 Lys Pro Val Val Ser 580 Glu	485 His Ser Ser Met Arg 565 Asp Ala Ser	Pro Pro Val 550 Ala Ser Glu Arg	Ser Ser 535 Glu Leu Gly Ala Ser 615	Gly Ala 520 Gly Val Pro Gln Ser 600 Ser	Pro 505 Glu His His Gln Thr 585 Ala Lys	490 Phe Ala Pro Arg Thr 570 Leu Pro Glu	Pro Thr Asp Pro 555 Arg Ser Gly Leu Leu	Arg Val Gln 540 Asp Thr Glu Arg Pro 620	Val Ala 525 Thr Ser Ala Asp Gly 605 Arg	Gln 510 Gly Glu Ser Ser 590 Arg	495 Ser Gly Thr Pro Thr 575 Gly Gln Glu	Pro Cys Asn Asp 560 Leu Val Ser Arg
Leu Pro Leu Gln 545 Val Ser Asp Val Pro 625	Val His Leu 530 His Asn Gln Ala Ser 610 Thr	Asn Leu 515 Pro Phe Glu Leu Gly 595 Thr	Gln 500 Lys Pro Val Val Ser 580 Glu Lys	485 His Ser Ser Met Arg 565 Asp Ala Ser	Pro Pro Val 550 Ala Ser Glu Arg Asn 630	Ser Ser 535 Glu Leu Gly Ala Ser 615 Lys	Gly Ala 520 Gly Val Pro Gln Ser 600 Ser	Pro 505 Glu His His Gln Thr 585 Ala Lys	A90 Phe Ala Pro Arg Thr 570 Leu Pro Glu Gly	Pro Thr Asp Pro 555 Arg Ser Gly Leu Leu 635	Arg Val Gln 540 Asp Thr Glu Arg Pro 620 Leu	Val Ala 525 Thr Ser Ala Asp Gly 605 Arg	Gln 510 Gly Glu Ser Ser 590 Arg Asn	495 Ser Gly Thr Pro Thr 575 Gly Gln Glu	Pro Cys Asn Asp 560 Leu Val Ser Arg
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Leu Pro Leu Gln 545 Val Ser Asp Val Pro 625 Thr	Val His Leu 530 His Asn Gln Ala Ser 610 Thr	Asn Leu 515 Pro Phe Glu Leu Gly 595 Thr Asp Val	Gln 500 Lys Pro Val Val Ser 580 Glu Lys Gly Arg	485 His Ser Ser Met Arg 565 Asp Ala Ser Ala Val 645	Pro Pro Val 550 Ala Ser Glu Arg Asn 630 Lys	Ser Ser 535 Glu Leu Gly Ala Ser 615 Lys	Gly Ala 520 Gly Val Pro Gln Ser 600 Ser Pro	Pro 505 Glu His His Gln Thr 585 Ala Lys Pro Ala Pro	A90 Phe Ala Pro Arg Thr 570 Leu Pro Glu Gly Ala 650	Pro Thr Asp Pro 555 Arg Ser Gly Leu 635 Thr	Arg Val Gln 540 Asp Thr Glu Arg Pro 620 Leu Leu	Val Ala 525 Thr Ser Ala Asp Gly 605 Arg Glu Gly	Gln 510 Gly Gly Glu Ser 590 Arg Asn Pro Ile Val	495 Ser Gly Thr Pro Thr 575 Gly Gln Glu Thr Ala 655	Pro Cys Asn Asp 560 Leu Val Ser Arg
Leu Pro Leu Gln 545 Val Ser Asp Val Pro 625 Thr Glu	Val His Leu 530 His Asn Gln Ala Ser 610 Thr Leu Gly	Asn Leu 515 Pro Phe Glu Leu Gly 595 Thr Asp Val Gly	Gln 500 Lys Pro Val Val Ser 580 Glu Lys Gly Arg	485 His Ser Ser Met Arg 565 Asp Ala Ser Ala Val 645 Asn	Pro Pro Val 550 Ala Ser Glu Arg Asn 630 Lys Thr	Ser Ser 535 Glu Leu Gly Ala Ser 615 Lys Lys Arg	Gly Ala 520 Gly Val Pro Gln Ser 600 Ser Pro Ser Gln	Pro 505 Glu His His Gln Thr 585 Ala Lys Pro Ala Pro 665	A90 Phe Ala Pro Arg Thr 570 Leu Pro Glu Gly Ala 650 Leu	Pro Thr Asp Pro 555 Arg Ser Gly Leu 635 Thr	Arg Val Gln 540 Asp Thr Glu Arg Pro 620 Leu Leu Arg	Val Ala 525 Thr Ser Ala Asp Gly 605 Arg Glu Gly Ile	Gln 510 Gly Glu Ser 590 Arg Asn Pro Ile Val 670	495 Ser Gly Thr Pro Thr 575 Gly Gln Glu Thr Ala 655 Thr	Pro Cys Asn Asp 560 Leu Val Ser Arg Ser 640 Ile
Leu Pro Leu Gln 545 Val Ser Asp Val Pro 625 Thr Glu	Val His Leu 530 His Asn Gln Ala Ser 610 Thr Leu Gly	Asn Leu 515 Pro Phe Glu Leu Gly 595 Thr Asp Val Gly Gly	Gln 500 Lys Pro Val Val Ser 580 Glu Lys Gly Arg	485 His Ser Ser Met Arg 565 Asp Ala Ser Ala Val 645 Asn	Pro Pro Val 550 Ala Ser Glu Arg Asn 630 Lys Thr	Ser Ser 535 Glu Leu Gly Ala Ser 615 Lys Lys Arg	Gly Ala 520 Gly Val Pro Gln Ser 600 Ser Pro Ser Gln Asn	Pro 505 Glu His His Gln Thr 585 Ala Lys Pro Ala Pro 665	A90 Phe Ala Pro Arg Thr 570 Leu Pro Glu Gly Ala 650 Leu	Pro Thr Asp Pro 555 Arg Ser Gly Leu 635 Thr	Arg Val Gln 540 Asp Thr Glu Arg Pro 620 Leu Leu Arg	Val Ala 525 Thr Ser Ala Asp Gly 605 Arg Glu Gly Ile	Gln 510 Gly Glu Ser 590 Arg Asn Pro Ile Val 670	495 Ser Gly Thr Pro Thr 575 Gly Gln Glu Thr Ala 655 Thr	Pro Cys Asn Asp 560 Leu Val Ser Arg Ser 640 Ile
Leu Pro Leu Gln 545 Val Ser Asp Val Pro 625 Thr Glu Gln	Val His Leu 530 His Asn Gln Ala Ser 610 Thr Leu Gly Arg	Asn Leu 515 Pro Phe Glu Leu Gly 595 Thr Asp Val Gly 675	Gln 500 Lys Pro Val Val Ser 580 Glu Lys Gly Arg Ala 660 Gly	485 His Ser Ser Met Arg 565 Asp Ala Ser Ala Val 645 Asn Ser	Pro Pro Val 550 Ala Ser Glu Arg Asn 630 Lys Thr	Ser Ser 535 Glu Leu Gly Ala Ser 615 Lys Lys Arg His	Gly Ala 520 Gly Val Pro Gln Ser 600 Ser Pro Ser Gln Asn 680	Pro 505 Glu His His Gln Thr 585 Ala Lys Pro Ala Pro 665 Cys	A90 Phe Ala Pro Arg Thr 570 Leu Pro Glu Gly Ala 650 Leu Gly	Pro Thr Asp Pro 555 Arg Ser Gly Leu 635 Thr Pro Gln	Arg Val Gln 540 Asp Thr Glu Arg Pro 620 Leu Leu Arg	Val Ala 525 Thr Ser Ala Asp Gly 605 Arg Glu Gly Ile Lys 685	Gln 510 Gly Glu Ser 590 Arg Asn Pro Ile Val 670 Val	495 Ser Gly Thr Pro Thr 575 Gly Gln Glu Thr Ala 655 Thr	Pro Cys Asn Asp 560 Leu Val Ser Arg Ser 640 Ile

695 700 690 Glu Ala Ala Arg Ile Ile Ala Glu Ala Phe Lys Thr Lys Asp Arg Asp 720 715 Tyr Ile Asp Phe Leu Val Thr Glu Phe Asn Val Met Leu 725 <210> 1993 <211> 957 <212> DNA <213> Homo sapiens <400> 1993 nngaaaacct acgggatgac acgtgccctc gatcacatcg acatcgccat cccagctggc cagteggteg cegteatggg geegteeggg teaggeaaga ceaccetget geactgettg toggggatoc totogootga otocggoagt atogaactgg ototgoogga cogcaccgto aacgtegaaa acctetetaa egaaggeega geaaagetae geegteaate eettggttte gtcttccaac aaggaatgct cgtacccgag ctcactgctg tcgagaacac cgccctaccc ctcatgetta aeggegtate ecaaacegat geggteaggt atgecaceca atggettgaa tcgatggggt taggcggcat ggaggatcgt cggattggtc agctctccgg gggccaagct caacqcqtca ctattgcccg gtcccaggta atcgatccgt cgattgtctt cgctgacgaa cccaccggag ccctcgactc agccaccgcc gtcgaagtca tggccattct gctttcggcg acgaccgggc ggggacgcac cctcgtcgtc gtcacccatg acgaggacgt tgcccgccgc tgccagcgca tccttcatct gcacgacggt cggatcgtct ctgaccacgt acgtcattcc gatgggaggt ggtgatcatg actataacgc cccctatcga accgggaacc gccgatcaaa 720 ggatecegte ceteceegte eeegageeee tgggagetae geeeggaegt ettaceaetg etgegatect cageatgace etcegtgeet cageegetga ceactecace tggeggttge cggtagttgc tttcgctgtc attgcaacca tcatcctcga cgtcactggc ggtgccgtca tgatgtggca tctaccggga gacaactctg gcttctacaa gctgacctcg acaattg 957 <210> 1994 <211> 224 <212> PRT <213> Homo sapiens <400> 1994 Xaa Lys Thr Tyr Gly Met Thr Arg Ala Leu Asp His Ile Asp Ile Ala 1 Ile Pro Ala Gly Gln Ser Val Ala Val Met Gly Pro Ser Gly Ser Gly

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Lys Thr Thr Leu Leu His Cys Leu Ser Gly Ile Leu Ser Pro Asp Ser
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Gly Ser Ile Glu Leu Ala Leu Pro Asp Arg Thr Val Asn Val Glu Asn
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Leu Ser Asn Glu Gly Arg Ala Lys Leu Arg Arg Gln Ser Leu Gly Phe
Val Phe Gln Gln Gly Met Leu Val Pro Glu Leu Thr Ala Val Glu Asn
Thr Ala Leu Pro Leu Met Leu Asn Gly Val Ser Gln Thr Asp Ala Val
                              105
Arg Tyr Ala Thr Gln Trp Leu Glu Ser Met Gly Leu Gly Gly Met Glu
                          120
Asp Arg Arg Ile Gly Gln Leu Ser Gly Gln Ala Gln Arg Val Thr
                                          140
                       135
Ile Ala Arg Ser Gln Val Ile Asp Pro Ser Ile Val Phe Ala Asp Glu
Pro Thr Gly Ala Leu Asp Ser Ala Thr Ala Val Glu Val Met Ala Ile
                                  170
               165
Leu Leu Ser Ala Thr Thr Gly Arg Gly Arg Thr Leu Val Val Thr
                              185
His Asp Glu Asp Val Ala Arg Arg Cys Gln Arg Ile Leu His Leu His
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<211> 59
<212> PRT
<213> Homo sapiens
<400> 1996
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25
His His His Val Met Thr Leu Asn Thr Val Lèu Ile Met Cys Asp Leu
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Asp Cys Gly Pro Ala Pro Arg Ala Leu Leu Cys
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tatggctacg cgt
313
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<211> 104
<212> PRT
<213> Homo sapiens
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Lys Lys Asp Leu Gly Lys Leu His Lys Pro Val Ser Ile Gly Arg Arg
Glu Met Leu Val Gly Leu Ala Ile Gly Gly Gly Ile Gly Phe Tyr Asp
Gly Leu Phe Gly Pro Gly Thr Gly Ser Phe Leu Met Phe Leu Phe Val
Arg Phe Leu Arg Phe Asp Phe Leu His Ala Ser Ala Ala Ala Lys Val
Val Asn Leu Ala Thr Asn Val Ala Ala Leu Cys Phe Phe Ile Pro Ser
Gly Asn Val Leu Tyr Gly Tyr Ala
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<211> 399
<212> DNA
<213> Homo sapiens
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120
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ggaagaatgg atcttactct cgctgaccct gagattgtcg ttaacaatgg cgatgatcat
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<211> 91
<212> PRT
<213> Homo sapiens
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Asp His Val Ile Met Ser Val Lys Ser Lys Thr Met Val Gly Gln Leu
Val Asp Tyr Gly Arg Ile Thr Phe Val Asp Met Thr Gly Ser Ile Thr
                            40
Gln Gly Gln Asn Asp Ala Ala Gln Val Val Gly Thr Asn Val Lys Leu
Asn Ser Gln Ala Val Asp Ala Phe Ala Gly Phe Tyr Gln Ala Gly Lys
Pro Met Asp Asp Ile Asp Ser Ser Leu Lys Leu
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<210> 2001
<211> 1434
<212> DNA
<213> Homo sapiens
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tacgctgccg cttctgacac ttacaggnag agcggaaccc catacacctt ccagccatga
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420
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540
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agcccqtttt cqtacctqqa aggaaacccc ttcactcctt tgcactgtgc agtgattaat
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cgagatgcca aaggacggac ccccttcac gccgctgcct tcgcggacaa tgtctctggg
1320
ctccqqatqc tgctqcaqca tcaagctgag gtgaacgcca ctgaccacac tggccgcact
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1434
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<211> 79
<212> PRT
<213> Homo sapiens
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Xaa Asn Glu Gly Arg His Asn Leu Leu Ile Ser Ser Ala Ala Asp Trp
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Arg Arg Asp Lys Phe Gly Arg Thr Pro Leu His Tyr Ala Ala Ala Asn
                                25
Gly Ser Tyr Gln Cys Ala Val Thr Leu Val Thr Ala Gly Ala Gly Val
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Asn Glu Ala Asp Cys Lys Gly Cys Ser Pro Leu His Tyr Ala Ala Ala
Ser Asp Thr Tyr Arg Xaa Ser Gly Thr Pro Tyr Thr Phe Gln Pro
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<211> 172
<212> PRT
<213> Homo sapiens
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Phe Ser Asp Val Ile Ala Asp Thr Ile Lys Glu Leu Gln Asp Ser Ala
Thr Tyr Asn Ser Leu Leu Gln Ala Leu Ser Lys Glu Arg Glu Asn Lys
Met His Phe Tyr Asp Ile Ile Ser Arg Glu Glu Lys Gly Arg Lys Gln
Ile Ile Ser Leu Gln Lys Gln Leu Ile Asn Phe Lys Lys Glu Trp Gln
                                        75
Phe Glu Val Gln Ser Gln Asn Glu Tyr Ile Ala Asn Leu Lys Asp Gln
Leu Gln Glu Met Lys Ala Lys Ser Asn Leu Glu Asn Arg Tyr Met Lys
                                                    110
Thr Asn Thr Glu Leu Gln Ile Ala Gln Thr Gln Lys Lys Cys Asn Arg
Thr Glu Glu Leu Leu Val Glu Glu Ile Glu Lys Leu Arg Met Lys Thr
                                            140
                        135
Glu Glu Glu Ala Arg Thr His Thr Glu Ile Glu Met Phe Leu Arg Lys
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                    150
Glu Gln Gln Val Gly Pro His Ser Phe Ser Met Leu
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<213> Homo sapiens
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agecegeegt gteacagggt etectgaceg getgggtagg gtttggeett atettacage
cagtgctgtg tttgctcaga tggacgcaca tggaaaccag gctaggatca tcttcccaat
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354
<210> 2006
<211> 111
<212> PRT
<213> Homo sapiens
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Leu Ile Asp Pro Gln Pro Cys Gly Glu Phe Gln Gly Gly Ile Val Leu
Val Ile Gly Val Arg Gly Gly Leu Xaa Ala Lys Ala Ala Leu Thr Phe
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Gly Lys Arg Asn Gly Lys Pro Ala Val Ser Gln Gly Leu Leu Thr Gly
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Trp Val Gly Phe Gly Leu Ile Leu Gln Pro Val Leu Cys Leu Leu Arg
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                                        75
Trp Thr His Met Glu Thr Arg Leu Gly Ser Ser Ser Gln Cys Leu Leu
Pro Ala Leu Val Cys Pro Glu Asn Asn Cys Lys Asp Ile Val Ala
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<212> DNA
<213> Homo sapiens
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tgcacgtgca tatgtgtaca cgtgtatgcg tgtacatgta tgagcatatg tacacgtgtg
240
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<210> 2008
<211> 111
<212> PRT
<213> Homo sapiens
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Cys Met Cys Val Cys Ile Cys Met Cys Val Cys Ala Cys Thr Cys Xaa
Cys Ile Cys Val Cys Met His Ala Cys Ala Tyr Val Cys Ile Xaa Met
Cys Thr His Val His Thr Cys Thr Cys Ser Cys Met Cys Thr Cys Ile
                        55
Cys Val His Val Tyr Ala Cys Thr Cys Met Ser Ile Cys Thr Arg Val
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Asp Val Cys Val Cys Met Cys Val Cys Thr Asp Met Pro Phe Pro Phe
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                                    90
Ile Gln Ala Gly Leu Ser Ile Ala Gly Arg Gln Gly Gln Leu Ser
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<211> 288
<212> DNA
<213> Homo sapiens
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gcagctccgg tcgccctggc catcggggca ggattcgtgc cggtgcgcaa gccggggaag
180
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<210> 2010
<211> 96
<212> PRT
<213> Homo sapiens
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Met Glu Ala Arg Gly Phe Leu Phe Ala Ala Pro Val Ala Leu Ala Ile
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Gly Ala Gly Phe Val Pro Val Arg Lys Pro Gly Lys Leu Pro Gly Gln
Val Tyr Ser Glu Thr Phe Ala Met Glu Tyr Gly Glu Glu Thr Leu Thr
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Val His Gln Tyr Ala Ile Lys Pro Gly Ser Arg Val Ile Ile Val Asp
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<211> 384
<212> DNA
<213> Homo sapiens
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atgttgattg ttatagccat ctctggagga gagggaaaaa gccaggtatc tagacagcga
aagcaaatgt gagccgaggg gacagtgccg teettegtte eteggcaaet eecacgagge
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<211> 123
<212> PRT
<213> Homo sapiens
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                                 25
Leu Ser Ser Arg Asp Gly Tyr Asn Asn Gln His Ser Val Val Leu
Val Ile Val Thr Asn Leu Cys Ser Pro Phe Tyr Gln Phe Thr Ile Cys
Ser Leu Pro His Ser Pro Ile Asn Lys Pro Ser Asn Pro Ser Ser Thr
                                         75
Val Asp Phe Tyr Ile Arg Pro Ser Gly Gly Phe Thr Gly Arg Leu Ala
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Lys His Ala Gly Gly Gly Lys Ser Glu Thr Val Met Leu Tyr Gly Pro
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Tyr Gly Gly Val Asn Met Gln Arg Leu Leu Glu
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309
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<211> 103
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<213> Homo sapiens
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Val Tyr Leu Ala Asn Ile Asn Ala Asp Asn Gln Thr Val Ile Ala Gly
                            40
Ser Asp Gly Ala Met Lys Ala Val Ala Asn Leu Val Arg Gly Asn Gly
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Val Ala Lys Arg Leu Ala Val Ser Val Pro Ser His Cys Ala Leu Leu
Glu Lys Pro Ala Glu Thr Leu Ala Gln Ala Phe Ala Glu Val Thr Leu
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                                    90
Lys Thr Pro Xaa Xaa Pro Xaa
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300

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Asp Thr Glu Arg Thr Val Ala Leu His Leu Pro Gln Phe Ala Gly Val
Ala Gly Ser Ser Leu Ile His Gly Gln Asp Ala Gln Pro Val Lys Ala
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<211> 143
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<213> Homo sapiens
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His Arg Thr Gly Thr Leu Glu Pro Gly Asp Lys Leu Leu Ala Ile Asp
Asn Ile Arg Leu Asp Asn Cys Pro Met Glu Asp Ala Val Gln Ile Leu
Arg Gln Cys Glu Asp Leu Val Lys Leu Lys Ile Arg Lys Asp Glu Asp
                    70
Asn Ser Asp Glu Leu Glu Thr Thr Gly Ala Val Ser Tyr Thr Val Glu
Leu Lys Arg Tyr Gly Gly Pro Leu Gly Ile Thr Ile Ser Gly Thr Glu
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Glu Pro Phe Asp Pro Ile Phe Ile Ser Gly Leu Pro Lys Arg Gly Leu
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Arg Leu Lys Glu Ser Gly Leu Ile Asp Tyr Leu Asn Val Ile Arg Gly
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       35
His Ile Asp Thr Asp Pro Gly Leu Thr Asp Val Ile Pro Ile Gln Gly
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Met Ala Ser Ala Pro His Leu Asp Phe Ala Gly Glu Ile Arg Ala Ala
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Thr Ser Phe Pro Val Phe His Ala Ala Lys Ile Gln Asp Val Ala Thr
Ala Arg His Ala Ile Ala Ala Gly Lys Val Asp Met Ile Gly Met Thr
                               105
Arg Ala His Met Thr Asp Pro His Ile Val Arg Lys Ile Met Glu Lys
                           120
Gln Glu Glu Asp Ile Arg Pro Cys Val Gly Ala Asn Tyr Cys Leu Asp
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Arg Ile Tyr Gln Gly Gly Leu Ala Phe Cys Ile His Asn Ala Ala Thr
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145
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797
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Gly Trp Ser Leu Pro Leu His Tyr Phe Gln Val Val Thr Trp Ala Val
                            40
Phe Val Gly Leu Ser Ser Ala Thr Phe Gly Ile Phe Ile Pro Phe Leu
                        55
Pro His Ala Trp Lys Tyr Ile Ala Tyr Val Val Ser Phe Ser Ser Trp
His Gly Leu Ser Gly Arg Gly Ser Trp Arg Thr Leu Arg Trp Thr Trp
Leu Trp Gly Leu Gly His Gly Cys Pro Val Ala Pro Val Thr Cys Pro
                                105
Gly Pro Asp Tyr Val Pro Arg Ala Cys Arg Trp Ala Gln Trp Pro Leu
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Met Val Leu Ala Ser Pro Gly
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Asp Ser Pro Asp Glu Met Ala Pro Thr Ala Pro Arg Ile Ile Thr Val
His Ile Pro Val Asp Lys Ile Gly Glu Val Ile Gly Pro Lys Gly Lys
Met Ile Asn Gln Ile Gln Asp Asp Thr Gly Ala Asn Ile Ser Ile Glu
                    70
Asp Asp Gly Thr Ile Phe Ile Gly Ala Asp Asn Gly Asp Ser Ala Glu
                85
Ser Ala Arg Ser Met Ile Asn Ala Ile Ala Asn Pro Gln Met Pro Glu
            100
                                105
Val Gly Glu Arg Tyr Leu Gly Thr Val Val Lys Thr Thr Ser Phe Gly
Ala Phe Val Ser Legiceu Pro Gly Lys Asp Gly Leu Leu His Ile Ser
Lys Met Arg Asp Leu Asn Asp Gly Lys Arg
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<212> DNA
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840
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Leu Glu Gln Asn Cys Thr Gly Asp Glu Asp Cys Asn Phe Phe Asp Cys
Phe Ser Arg Cys Asp Leu Arg Val Asn Lys Cys Gly Ala Gln Arg Val
                    70
Asn Asn Asn Leu Gln Val Ile Cys Asp Lys Ile Phe Arg His Trp Phe
                85
                                    90
Ser Ala Pro Leu Lys Ser Ser Ala Val Ser Phe Gln Leu Gln Leu Gln
                                105
Leu Gln Glu Ala Val Gln Glu Cys Ala Asp Pro Gly Val Pro Ser Gly
                            120
Asn Thr Arg Arg Ala Ala Ser Ser Val Phe Trp Lys Leu Arg Gln Leu
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Leu Gln Ala Thr Leu Arg Glu Leu Gln Glu Ala Glu Lys
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540
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Ser Cys Arg Leu Lys Phe Lys Ile Gln Val Ala Pro Tyr Ser Ile Phe
Leu His Lys Glu Arg Leu His Val Leu Ile Leu Cys Gly Leu Cys Tyr
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Leu Arg Ser Asn Gln Glu Ser Leu Ile Leu Ser Gln Lys Cys Leu Leu
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6660				ttccacctct	
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6780				tgaaaacatt	
6840				attttacaa	•
6900				ttaaatctct	
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Leu Asp Ser Lys Thr Thr Leu Thr Ser Asp Glu Ser Val Lys Asp His
                            40
Thr Thr Ala Gly Arg Val Val Ala Gly Gln Ile Phe Leu Asp Ser Glu
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Glu Ser Glu Leu Glu Ser Ser Ile Gln Glu Glu Glu Asp Ser Leu Lys
                                                             80
                    70
                                        75
Ser Gln Glu Gly Glu Ser Val Thr Glu Asp Ile Ser Phe Leu Glu Ser
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				85					90					95	
Pro	Asn	Pro	Glu 100	Asn	Lys	Asp	Tyr	Glu 105	Glu	Pro	Lys	Lys	Val 110	Arg	Lys
Pro	Ala	Leu 115	Thr	Ala	Ile	Glu	Gly 120	Thr	Ala	His	Gly	Glu 125	Pro	Cys	His
Phe	Pro 130	Phe	Leu	Phe	Leu	Asp 135	Lys	Glu	Tyr	Asp	Glu 140	Cys	Thr	Ser	Asp
145			Asp		150		_			155			_	-	160
Ala	Asp	Glu	Lys	Trp 165	Gly	Phe	Суѕ	Glu	Thr 170	Glu	Glu	Glu	Ala	Ala 175	Lys
			Met 180					185		_			190		_
		195	Gly				200			_	_	205		_	_
_	210		Lys			215					220				_
225		-	Ala		230			_		235					240
		_	Glu	245			_		250			_		255	_
_			Ala 260		_			265					270		
		275	Ala	-			280		_		٠	285			_
_	290		Ile			295					300		_		
305	_		Leu		310	_				315			_	_	320
			His	325			_		330			_	_	335	
			Ile 340					345					350		
	_	355	Leu			_	360			-	_	365			
	370	_	Asp			375			_		380				
385	_	_	Arg	_	390					395					400
				405					410					415	Leu
	_		Tyr 420					425					430		
		435	His	_		_	440		•	_		445			
	450		Gly			455		_			460				
465			Asp		470		_	_		475					480
			Asp	485					490					495	
			Lys 500				_	505					510		
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515
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His Ala Ser Gly Thr Gly Val Met Arg Ser Cys His Thr Ala Val Glu
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                                          540
Leu Phe Lys Asn Val Cys Glu Arg Gly Arg Trp Ser Glu Arg Leu Met
                  550
                                      555
Thr Ala Tyr Asn Ser Tyr Lys Asp Gly Asp Tyr Asn Ala Ala Val Ile
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Gln Tyr Leu Leu Ala Glu Gln Gly Tyr Glu Val Ala Gln Ser Asn
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Ala Ala Phe Ile Leu Asp Gln Arg Glu Ala Ser Ile Val Gly Glu Asn
                           600
                                              605
Glu Thr Tyr Pro Arg Ala Leu Leu His Trp Asn Arg Ala Ala Ser Gln
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Gly Tyr Thr Val Ala Arg Ile Lys Leu Gly Asp Tyr His Phe Tyr Gly
                                                          640
                   630
                                      635
Phe Gly Thr Asp Val Asp Tyr Glu Thr Ala Phe Ile His Tyr Arg Leu
                                  650
Ala Ser Glu Gln Gln His Ser Ala Gln Ala Met Phe Asn Leu Gly Tyr
Met His Glu Lys Gly Leu Gly Ile Lys Gln Asp Ile His Leu Ala Lys
                           680
Arg Phe Tyr Asp Met Ala Ala Glu Ala Ser Pro Asp Ala Gln Val Pro.
                                          700
                       695
Val Phe Leu Ala Leu Cys Lys Leu Gly Val Val Tyr Phe Leu Gln Tyr
                                      715
                   710
Ile Arg Glu Thr Asn Ile Arg Asp Met Phe Thr Gln Leu Asp Met Asp
                                  730
Gln Leu Leu Gly Pro Glu Trp Asp Leu Tyr Leu Met Thr Ile Ile Ala
                              745
Leu Leu Gly Thr Val Ile Ala Tyr Arg Gln Arg Gln His Gln Asp
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Met Pro Ala Pro Arg Pro Pro Gly Pro Arg Pro Ala Pro Pro Gln Gln
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Glu Gly Pro Pro Glu Gln Gln Pro Pro Gln
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<211> 662
<212> DNA
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cgcagcgcga tcgaacaggc ttccctggac cgctccaatc aattqaccga cgaattgctc
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accggcgcca gctccgatca ccaggaaccg tacctgcgcc aggtcatggc ctttatcggg
attcatqacg tcacgttcat tcatgccgaa ggggtgaact tgagcggtga cttccaggaa
aaaqqcctta accacqccaa ggcgttgctg gcgcaacttg tggcatgaac cgagtcaacg
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<211> 195
<212> PRT
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                                25
Ile Thr Val Arg Asp Val Ala Leu Asn Pro Val Pro His Leu Asp Thr
                            40
His Leu Leu Gly Gly Trp Met Lys Pro Ala Glu Gln Arg Ser Ala Ile
Glu Gln Ala Ser Leu Asp Arg Ser Asn Gln Leu Thr Asp Glu Leu Leu
                    70
Ala Ala Asp Val Leu Val Met Ala Ala Pro Met Tyr Asn Phe Ala Ile
                                    90
Pro Ser Thr Leu Lys Ala Trp Leu Asp His Val Leu Arg Ala Gly Val
                                105
Thr Phe Lys Tyr Thr Ala Thr Gly Pro Gln Gly Leu Leu His Gly Lys
                            120
Arg Ala Ile Val Leu Thr Ala Arg Gly Gly Ile His Thr Gly Ala Ser
                        135
Ser Asp His Gln Glu Pro Tyr Leu Arg Gln Val Met Ala Phe Ile Gly
                    150
                                        155
Ile His Asp Val Thr Phe Ile His Ala Glu Gly Val Asn Leu Ser Gly
                                   170
Asp Phe Gln Glu Lys Gly Leu Asn His Ala Lys Ala Leu Leu Ala Gln
                                185
Leu Val Ala
       195
<210> 2033
<211> 380
<212> DNA
<213> Homo sapiens
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495
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<211> 98
<212> PRT
<213> Homo sapiens
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Asp Thr Ser Cys Leu His Phe Phe His Val Cys Met Tyr Val Cys Met
            20
                                25
Tyr Val Cys Met Tyr Val Cys Met Tyr Ala Xaa Met Phe Pro Phe His
Leu Ala Cys Leu His Phe Cys Cys Tyr Cys Cys Tyr Leu Cys Val Gly
                        55
Ala Pro Asn Gly Val Pro Tyr Phe Ser Asp Ala Val Phe Ile Phe Leu
Asp Ser Phe Tyr Cys Leu Val Phe Ser Leu His Asn Pro Tyr Cys Ser
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Leu Tyr
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<211> 327
<212> DNA
<213> Homo sapiens
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ggaagagtga ggttggagtg cctttcccgc gctcatcttc cgtccccact ccacgcccag
caaatccaaa caccgcggcc tetggtggcc cgggcttcca tttcccctgg aggggcaagg
gcgtttcctc ttccgcccaa ccggggcgct gagcggcggg aacagcggcg ggggctttgt
ggtcccgggg ggtccgagtg tgtgtcaggg gctggggggg gggatgggcg cggcccctgg
gtatccctca cggtcctggt tcatgag
327
<210> 2038
<211> 98
<212> PRT
<213> Homo sapiens
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Met Glu Lys Trp Gly Arg Thr Gln Thr Gly Arg Val Arg Leu Glu Cys
                                    10
Leu Ser Arg Ala His Leu Pro Ser Pro Leu His Ala Gln Gln Ile Gln
```

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25
            20
Thr Pro Arg Pro Leu Val Ala Arg Ala Ser Ile Ser Pro Gly Gly Ala
                            40
Arg Ala Phe Pro Leu Pro Pro Asn Arg Gly Ala Glu Arg Arg Glu Gln
Arg Arg Gly Leu Cys Gly Pro Gly Gly Ser Glu Cys Val Ser Gly Ala
Gly Ala Gly Asp Gly Arg Gly Pro Trp Val Ser Leu Thr Val Leu Val
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His Glu
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<213> Homo sapiens
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cggcgtgccg aaagccaggg atccttcacc gtagaccttg gaccgatgga ggcccccggc
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300
aacgcgt
307
<210> 2040
<211> 94
<212> PRT
<213> Homo sapiens
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Met Ala Asp Met Tyr Ala Lys Gly Glu Phe Arg Arg Thr Arg Leu Pro
Gly Ala Ser Ile Gly Pro Arg Ser Thr Val Lys Asp Pro Trp Leu Ser
                                25
Ala Arg Arg Met Arg Pro Phe Phe Ala Thr Ser Lys Arg Met Pro Pro
                            40
Arg His Met Pro Val Pro Val Leu Ala Gln Ser Leu Ser Met Thr Ala
                                            60
Ser Ser Arg Cys Phe Pro Gly Asn Thr Ser Arg Ser Arg Arg Arg Pro
Arg Thr Leu Arg Ser Arg Pro Leu Ser Gln Ser Gly Ser Pro
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<211> 348
<212> DNA
<213> Homo sapiens
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geggeeetgg eeggetgggt egegaeeeeg eeggaggaae gegeegegge getgegeaee
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<211> 116
<212> PRT
<213> Homo sapiens
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Gly Ala Phe Leu Ala Ser Phe Leu Pro Phe Ala Arg Arg Ile Ala Glu
                                25
Ala Gly Val Arg Asn Ser Leu Ala Gln Leu Val Ala Lys Leu Thr Leu
Pro Gly Met Pro Asp Ile Tyr Gln Gly Cys Glu Met Trp Asp Leu Ser
Leu Val Asp Arg Asp Asn Arg Arg Pro Val Asp Tyr Glu Thr Arg Asp
Ala Ala Leu Ala Gly Trp Val Ala Thr Pro Pro Glu Glu Arg Ala Ala
                                     90
Ala Leu Arg Thr Leu Leu Thr Asp Trp Arg Ser Gly Ala Val Lys Leu
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                                105
Ala Val Thr Arg
        115
<210> 2043
<211> 712
<212> DNA
<213> Homo sapiens
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gaagattegg tgegeagage cetgtetega atgegeteee gggatgeegt ceaeggegag
gaacgtgccg ataccgggga tggaccccgc cggtggatca ttgatccgat cgacggcact
gcgaattttc tgcgtggggt cccagtgtgg gccaccctca ttgccctcag cgtcgaggac
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300
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ggctcaggag catggtcggg caaatccctg gcctcagcga caccgatcca cgtctcgaat
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<210> 2044
<211> 233
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Asp Leu Ala Val Glu Asp Ser Val Arg Arg Ala Leu Ser Arg Met Arg
Ser Arg Asp Ala Val His Gly Glu Glu Arg Ala Asp Thr Gly Asp Gly
Pro Arg Arg Trp Ile Ile Asp Pro Ile Asp Gly Thr Ala Asn Phe Leu
                        55
Arg Gly Val Pro Val Trp Ala Thr Leu Ile Ala Leu Ser Val Glu Asp
                    70
Gln Ile Val Ala Ser Val Val Ser Ala Pro Ala Leu Lys Arg Arg Trp
Trp Ala Ala Arg Gly Ser Gly Ala Trp Ser Gly Lys Ser Leu Ala Ser
                                105
Ala Thr Pro Ile His Val Ser Asn Val Arg Asn Leu Ala Asp Ala Phe
Leu Ser Tyr Ser Ser Leu His Gly Trp Val Glu Ser Gly Arg Gly His
                        135
Gly Phe Gly Glu Leu Met Arg Ser Val Trp Arg Thr Arg Ala Phe Gly
                                        155
                    150
Asp Phe Trp Ser Tyr Met Met Val Ala Glu Gly Val Val Asp Val Ala
                165
                                    170
Cys Glu Pro Glu Leu Ser Leu His Asp Met Ala Ala Leu Asp Ala Ile
                                185
Val Thr Glu Ala Gly Gly Lys Phe Thr Gly Leu Asp Gly Lys Asp Gly
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Pro Trp Ser Gly Asn Ala Leu Ala Ser Asn Gly Phe Leu His Asp Gln
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                        215
Ala Leu Ala Met Val Gln Pro Gln Glu
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225
<210> 2045
<211> 406
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<212> DNA
<213> Homo sapiens
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gagatogtog ogatgaotgg ogaoggtgto aacgaogcoo cotogotoaa ggoggoocat
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406
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<211> 135
<212> PRT
<213> Homo sapiens
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Pro Gly Gln Gly Met Arg Arg Met Gly Asp Gly Asp Gly Pro Gly Ala
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Gly Pro Gly Arg Ser Leu Arg Arg Xaa Tyr Arg Leu Trp Pro Arg Arg
Val Gly Arg Asn Arg Ser Thr Gly Gly Leu Ala Pro His Gln Cys Pro
                        55
Glu Pro Glu Ala Leu Arg Ile Arg Pro Arg Pro Phe Lys Ala Asp Gly
Glu Ile Val Ala Met Thr Gly Asp Gly Val Asn Asp Ala Pro Ser Leu
Lys Ala Ala His Ile Gly Val Ala Met Asp Lys Arg Gly Thr Asp Val
                                 105
Ala Arg Glu Ala Ser Ala Met Val Leu Leu Glu Asp Asp Phe Gly Ser
                            120
Ile Val Gln Ser Val Arg Leu
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<210> 2047
<211> 796
<212> DNA
<213> Homo sapiens
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120
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PCT/US00/08621 WO 00/58473

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<213> Homo sapiens
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Gln Arg Glu Ala Ala Phe Ser Pro Gly Gln Gln Asp Trp Ser Arg Asp
Phe Cys Ile Glu Ala Ser Glu Arg Ser Tyr Gln Phe Gly Ile Ile Gly
Asn Asp Arg Val Ser Gly Ala Gly Phe Ser Pro Ser Ser Lys Met Glu
Gly Gly His Phe Val Pro Pro Gly Lys Thr Thr Ala Gly Ser Val Asp
                   70
Trp Thr Asp Gln Leu Gly Leu Arg Asn Leu Glu Val Ser Ser Cys Val
Gly Ser Gly Gly Ser Ser Glu Ala Arg Glu Ser Ala Val Gly Gln Met
                               105
Gly Trp Ser Gly Gly Leu Ser Leu Arg Asp Met Asn Leu Thr Gly Cys
Leu Glu Ser Gly Gly Ser Glu Glu Pro Gly Gly Ile Gly Ile Gly Glu
                       135
Lys Asp Trp Thr Ser Asp Val Asn Val Lys Ser Lys Asp Leu Ala Glu
                                      155
145
                   150
<210> 2049
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<211> 516

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<213> Homo sapiens
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qccaacqctc ccccqccaat cqccctqqqc ctqttaqtaq tcqccattaq cqqcccttca
gectaeggtg eegectgtge ggtgatgttg gteagttggg eteegetgge egeceattgt
gettegttgt tggeggaage eegeaegeag eestatatee geatgttgee ggtattggge
gteggeegat ggegeaeget gacceaetae etgetgeegg egetetetge teecetgetg
cgccacgcca tgttgcgtct gccgggcatt gcgctggcgc tggcggcctt gggttttttt
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516
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<211> 172
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<213> Homo sapiens
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Leu Met Cys Gly Val Ile Glu Leu Ala Asn Ala Pro Pro Pro Ile Ala
Leu Gly Leu Leu Val Val Ala Ile Ser Gly Pro Ser Ala Tyr Gly Ala
                        55
Ala Cys Ala Val Met Leu Val Ser Trp Ala Pro Leu Ala Ala His Cys
                                        75
Ala Ser Leu Leu Ala Glu Ala Arg Thr Gln Pro Tyr Ile Arg Met Leu
                                    90
Pro Val Leu Gly Val Gly Arg Trp Arg Thr Leu Thr His Tyr Leu Leu
                                105
Pro Ala Leu Ser Ala Pro Leu Leu Arg His Ala Met Leu Arg Leu Pro
Gly Ile Ala Leu Ala Leu Ala Ala Leu Gly Phe Phe Gly Leu Gly Pro
                        135
                                            140
Gln Pro Pro Ser Ala Glu Trp Gly Leu Val Leu Ala Glu Gly Met Pro
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Tyr Leu Glu Arg Ala Pro Trp Gly Val Leu Ala Pro
                                    170
                165
<210> 2051
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<211> 2031

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<213> Homo sapiens
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411
<210> 2052
<211> 137
<212> PRT
<213> Homo sapiens
<400> 2052
Glu Gln Asn Tyr Arg Ser Thr Gly Asn Ile Leu Lys Ser Ala Asn Gln
Leu Ile Ser Asn Asn Ser Asp Arg Leu Gly Lys Asn Leu Trp Thr Asp
                                25
Gly Glu Met Gly Glu Pro Val Gly Ile Tyr Ala Ala Phe Asn Glu Leu
Asp Glu Ala Lys Phe Val Ala Ser Gln Ile Gln Asn Trp Val Asp Asp
Gly Glu Leu Asp Asp Cys Ala Val Leu Tyr Arg Ser Asn Ser Gln
Ser Arg Val Ile Glu Glu Ala Leu Ile Arg Cys Gln Ile Pro Tyr Arg
Ile Tyr Gly Gly Met Arg Phe Phe Glu Arg Gln Glu Ile Lys Asp Ala
                                105
Leu Ala Tyr Leu Arg Leu Ile Asn Asn Arg Gln Asp Asp Ala Ala Phe
Glu Arg Val Ile Asn Thr Pro Thr Arg
    130
                        135
<210> 2053
<211> 287
<212> DNA
<213> Homo sapiens
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120
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ctggccctga cctgccagag cactacctct gtgtactcct ctttcgtctt taacctgttc
acacctgagg gtgccgaggg cccgactccg caaacccagc accagctgaa ggccctgtgc
tccctqqctq cagagggtat gtggacagac acatttgagt tttgtga
287
<210> 2054
<211> 79
<212> PRT
<213> Homo sapiens
<400> 2054
Ile Cys Gln Ile Pro Leu Leu Cys Trp Ile Leu Cys Thr Ser Leu Lys
Gln Glu Met Gln Lys Gly Lys Asp Leu Ala Leu Thr Cys Gln Ser Thr
Thr Ser Val Tyr Ser Ser Phe Val Phe Asn Leu Phe Thr Pro Glu Gly
Ala Glu Gly Pro Thr Pro Gln Thr Gln His Gln Leu Lys Ala Leu Cys
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Ser Leu Ala Ala Glu Gly Met Trp Thr Asp Thr Phe Glu Phe Cys
                    70
<210> 2055
<211> 298
<212> DNA
<213> Homo sapiens
<400> 2055
nnacgcgttg ttatgaacaa tgacggtgtc ctctaccccg atacctgcgt gggtactgat
teccaeacea ceatggaaaa tggtettgge attetggget ggggegtegg tggtattgaa
geogaggetg ctatgettgg ccageceate tecatgetta tececegtgt tgttggettt
aaacttactg gccaaacaca gccgggtgtc accgctacag atgttgttct taccattact
gatatgette gecageatgg tgtgggtgga aaattegggg aattetatgg gggaageg
298
<210> 2056
<211> 99
<212> PRT
<213> Homo sapiens
<400> 2056
Xaa Arg Val Val Met Asn Asn Asp Gly Val Leu Tyr Pro Asp Thr Cys
                                    10
Val Gly Thr Asp Ser His Thr Thr Met Glu Asn Gly Leu Gly Ile Leu
                                25
Gly Trp Gly Val Gly Gly Ile Glu Ala Glu Ala Ala Met Leu Gly Gln
        35
                            40
Pro Ile Ser Met Leu Ile Pro Arg Val Val Gly Phe Lys Leu Thr Gly
```

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50
                        55
                                            60
Gln Thr Gln Pro Gly Val Thr Ala Thr Asp Val Val Leu Thr Ile Thr
Asp Met Leu Arg Gln His Gly Val Gly Gly Lys Phe Gly Glu Phe Tyr
                85
                                    90
Gly Gly Ser
<210> 2057
<211> 569
<212> DNA
<213> Homo sapiens
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120
caaaatctag ttggaccaaa caacgcccag tatggtcgtt atctagcctt tggtgatatc
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ttqqatatca caqaaqccac tactacaact tcttacaccc aagatggaac gacctttaaa
agagaaacct totcaagtta cootgatgat gttactgtta ctcacttgac ccaaaaaaggg
qacaaaaaac ttgattttac agtttggaat agcttaacag aagatttact tgctaacgga
gactactcag cggaatattc taactacaag agtggccatg ttacgacaga cccaaatggt
atcctactaa aaggtacagt caaagataat ggcctccagt tcgcatccta tctaggaatt
aaaacggacg gaaaagttac tgttcatga
569
<210> 2058
<211> 128
<212> PRT
<213> Homo sapiens
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Met Val Phe Asn Asn Gln Lys Lys Gly Leu Asp Thr Val Thr Asp Tyr
His Arg Gly Leu Asp Ile Thr Glu Ala Thr Thr Thr Thr Ser Tyr Thr
            20
                                25
Gln Asp Gly Thr Thr Phe Lys Arg Glu Thr Phe Ser Ser Tyr Pro Asp
Asp Val Thr Val Thr His Leu Thr Gln Lys Gly Asp Lys Leu Asp
Phe Thr Val Trp Asn Ser Leu Thr Glu Asp Leu Leu Ala Asn Gly Asp
                                        75
Tyr Ser Ala Glu Tyr Ser Asn Tyr Lys Ser Gly His Val Thr Thr Asp
Pro Asn Gly Ile Leu Leu Lys Gly Thr Val Lys Asp Asn Gly Leu Gln
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105
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Phe Ala Ser Tyr Leu Gly Ile Lys Thr Asp Gly Lys Val Thr Val His
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                            120
                                                125
<210> 2059
<211> 644
<212> DNA
<213> Homo sapiens
<400> 2059
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agcaatcgac ctgtaggact cagccatgat cgactgggca tcctcgtata gtcgcgatgc
egeaacegee tgegetteea ageetgeage gaegtaagag geeeteteae acaetgaace
gategeteca gacaaegtgg aagegataae etegegtege ttetgetgat tetgggeeaa
getegacaag aagaacegea gaggggegae ggeetggtea gggagegeae etteagegtt
cgtcttggtc tccgggacag caaaaagcgg ggaatcagcc aggccacgct ccgtcatgag
teggeegagg teegeeggta ceteteteat ggetteeaca ggaacgeggt cacaccac
cgcgatcgac gcgtgcctct cttgagcctc gttgaggaaa tcccacggca cagcgtcagc
gtagcgggct gctgaggtga caaagatcca cagatccgcg gcctggagca actgagccgc
540
cagatcacga ttgcgggtca ccacagagtc gatgtccggg gcatcgagga tggccaaacc
tegeggaate ettgacteeg egacgagetg caaactegae gegt
<210> 2060
<211> 130
<212> PRT
<213> Homo sapiens
<400> 2060
Met Arg Glu Val Pro Ala Asp Leu Gly Arg Leu Met Thr Glu Arg Gly
Leu Ala Asp Ser Pro Leu Phe Ala Val Pro Glu Thr Lys Thr Asn Ala
            20
                                25
Glu Gly Ala Leu Pro Asp Gln Ala Val Ala Pro Leu Arg Phe Phe Leu
Ser Ser Leu Ala Gln Asn Gln Gln Lys Arg Arg Glu Val Ile Ala Ser
Thr Leu Ser Gly Ala Ile Gly Ser Val Cys Glu Arg Ala Ser Tyr Val
Ala Ala Gly Leu Glu Ala Gln Ala Val Ala Ala Ser Arg Leu Tyr Glu
                                    90
Asp Ala Gln Ser Ile Met Ala Glu Ser Tyr Arg Ser Ile Ala Ala Gln
            100
                                105
Ser Ala Asp Gly Thr Leu Leu Arg Gly Glu Val Leu Ala Arg Trp His
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125
                            120
        115
Glu Phe
    130
<210> 2061
<211> 481
<212> DNA
<213> Homo sapiens
<400> 2061
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atgetgtgat tacgcgccag ccccgtcaca ccgtacgggt ggtaggactg ggcaaagaag
acgccgccac ctggatgcac tgaggtgtgc acagccacgt ggagatgatg ctgggggctc
acggtgactc tcaggaggcc ctggcctggc ctatctggag ccttctctgt gaaatgaggc
tggtaacgcc cactagcagg gttgtagggg acatggatct gtggccacct cctcaagggt
tgccacacgc accaggtect gactgggagt ccggccccca gggcctgtgg atggctggcc
tgggcccagc ctccgccccc aagggtgctg gcacctggca tgtgcccgac agttggggcc
ggctggtggg aaggtgtgtg tcaggtggcg gagcctcggt gccaggatct cactcacgcg
480
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481
<210> 2062
<211> 133
<212> PRT
<213> Homo sapiens
<400> 2062
Met Pro Gly Ala Ser Thr Leu Gly Gly Gly Gly Trp Ala Gln Ala Ser
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His Pro Gln Ala Leu Gly Ala Gly Leu Pro Val Arg Thr Trp Cys Val
Trp Gln Pro Leu Arg Arg Trp Pro Gln Ile His Val Pro Tyr Asn Pro
                            40
Ala Ser Gly Arg Tyr Gln Pro His Phe Thr Glu Lys Ala Pro Asp Arg
                        55
Pro Gly Gln Gly Leu Leu Arg Val Thr Val Ser Pro Gln His His Leu
                    70
His Val Ala Val His Thr Ser Val His Pro Gly Gly Val Phe Phe
Ala Gln Ser Tyr His Pro Tyr Gly Val Thr Gly Leu Ala Arg Asn His
                                105
Ser Ile Trp Gly His Thr Met Ala Thr Pro Ala Pro Ser Cys Val Ala
                                                 125
                            120
        115
Leu Leu Thr Arg Leu
    130
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<210> 2063
<211> 419
<212> DNA
<213> Homo sapiens
<400> 2063
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geggacacca atgeceegca catgetttee gaeggecaat acgeeteecg eeggggeate
ategacgecg tecaatetge egeeggttge tecateegeg agatetegaa tgeggtggae
tttgccgcca ccgtcaatcc cgccgaggcg gaactctatc gccgccgcgt gcaccacgtg
qtqqaaqaaa ccaaccqqac cctagatqcc qctaccqcqc tqqcatcttc cqatctagat
acatteegge ggettatgeg egagageeac atetecetge gegacettta tgaggteace
acteeggage tegacteegt ttttacegeg geeggegage tgggegeteg catgannnn
<210> 2064
<211> 139
<212> PRT
<213> Homo sapiens
<400> 2064
Ala Gly Ala Val Glu Arg Val Pro Phe Asn Ile Glu Ala Gln Asp Met
Val Leu Leu Ile Ala Asp Thr Asn Ala Pro His Met Leu Ser Asp Gly
Gln Tyr Ala Ser Arg Arg Gly Ile Ile Asp Ala Val Gln Ser Ala Ala
                            40
Gly Cys Ser Ile Arg Glu Ile Ser Asn Ala Val Asp Phe Ala Ala Thr
                        55
Val Asn Pro Ala Glu Ala Glu Leu Tyr Arg Arg Val His His Val
Val Glu Glu Thr Asn Arg Thr Leu Asp Ala Ala Thr Ala Leu Ala Ser
Ser Asp Leu Asp Thr Phe Arg Arg Leu Met Arg Glu Ser His Ile Ser
                                105
Leu Arg Asp Leu Tyr Glu Val Thr Thr Pro Glu Leu Asp Ser Val Phe
                            120
Thr Ala Ala Gly Glu Leu Gly Ala Arg Met Xaa
    130
                        135
<210> 2065
<211> 598
<212> DNA
<213> Homo sapiens
<400> 2065
geoggegeta tggcetetet getegeegae geogeegatg ceetteeegg egeaaaggtg
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cgcqcqaccq ttactqqatc qqcgggattg ggaaccgcag aggcattggg ccttactttc
attcaggagg tcatagctga gacggccgcc gtccaacgtt ggaatcccga cgccgacgtg
cttctcgaac tcggtggtga ggatgccaag atcacctacc ttaagccggt ccccgaacag
cgcatgaatg gttcgtgtgc tggtggcacc ggtgccttca tcgaccagat ggctaccctg
ctgcacaccg acactecegg ceteaatgae etegeatece gagecaagae catecateeg
ategeetege getgtggtgt ttttgecaag teegacette ageeeeteat taaegaggga
qcccqccacq aqqatctqqc tqcctcgqtc ctgcagqctg tcgccactca gtgcattgcc
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tttatgccaa gtttgcgaga cgctttctcg cgcgtcctcg acggtaaggt tgacgcgt
598
<210> 2066
<211> 199
<212> PRT
<213> Homo sapiens
<400> 2066
Ala Gly Ala Met Ala Ser Leu Leu Ala Asp Ala Ala Asp Ala Leu Pro
Gly Ala Lys Val Arg Ala Thr Val Thr Gly Ser Ala Gly Leu Gly Thr
Ala Glu Ala Leu Gly Leu Thr Phe Ile Gln Glu Val Ile Ala Glu Thr
Ala Ala Val Gln Arg Trp Asn Pro Asp Ala Asp Val Leu Leu Glu Leu
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Gly Gly Glu Asp Ala Lys Ile Thr Tyr Leu Lys Pro Val Pro Glu Gln
                                         75
                    70
Arg Met Asn Gly Ser Cys Ala Gly Gly Thr Gly Ala Phe Ile Asp Gln
Met Ala Thr Leu Leu His Thr Asp Thr Pro Gly Leu Asn Asp Leu Ala
Ser Arg Ala Lys Thr Ile His Pro Ile Ala Ser Arg Cys Gly Val Phe
                                                 125
                            120
Ala Lys Ser Asp Leu Gln Pro Leu Ile Asn Glu Gly Ala Arg His Glu
                                             140
                        135
Asp Leu Ala Ala Ser Val Leu Gln Ala Val Ala Thr Gln Cys Ile Ala
                    150
                                        155
Gly Leu Ala Cys Gly Arg Pro Ile Arg Gly Lys Val Ile Phe Leu Gly
                165
                                    170
Gly Pro Leu His Phe Met Pro Ser Leu Arg Asp Ala Phe Ser Arg Val
                                185
                                                     190
Leu Asp Gly Lys Val Asp Ala
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<210> 2067
<211> 366
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<212> DNA
<213> Homo sapiens
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ttccagcaga tgctgcaaac ctggacccgc agcggcacgc tgcaggaggc cgtggccaac
aagategeeg aatggetgga tgeegaeetg caacagtggg acattteeeg egatgeaeeg
tacttcggtt tcgagatccc gggcgagcca ggcaagtatt tctacgtgtg gctggacgcg
ccgatcggct acatggccag tttcaagaac ctgtgcgacc gcacgccgga gctggacttc
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accggt
366
<210> 2068
<211> 122
<212> PRT
<213> Homo sapiens
<400> 2068
Phe Gln Gln Met Leu Gln Thr Trp Thr Arg Ser Gly Thr Leu Gln Glu
Ala Val Ala Asn Lys Ile Ala Glu Trp Leu Asp Ala Asp Leu Gln Gln
Trp Asp Ile Ser Arg Asp Ala Pro Tyr Phe Gly Phe Glu Ile Pro Gly
                            40
Glu Pro Gly Lys Tyr Phe Tyr Val Trp Leu Asp Ala Pro Ile Gly Tyr
                         55
Met Ala Ser Phe Lys Asn Leu Cys Asp Arg Thr Pro Glu Leu Asp Phe
Asp Ala Phe Trp Ala Lys Asp Ser Thr Ala Glu Leu Tyr His Phe Ile
                                     90
Gly Lys Asp Ile Val Asn Phe His Ala Leu Phe Trp Pro Ala Met Leu
Glu Gly Ser Gly Tyr Arg Lys Pro Thr Gly
<210> 2069
<211> 280
<212> DNA
<213> Homo sapiens
<400> 2069
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catggggcct cgccgcaggc catctctcca gacctgggct caccctgccc ctgtgctgtt
geetttgget ggaattecae eccageette ttgeeteaag aaegeeette eccetteaga
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180

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totcatqqqc acaqqccccq tottcctaaa cqqqqtcaqa gcccccaqta atcatqacaa
agaccetete etegateaag etttggteaa geteetaeee
280
<210> 2070
<211> 90
<212> PRT
<213> Homo sapiens
<400> 2070
Met Val Glu Thr Val Arg Val Gln Gly Val Pro Glu Pro Ser Leu Gly
Cys Met Gly Pro Arg Arg Pro Ser Leu Gln Thr Trp Ala His Pro
                                25
Ala Pro Val Leu Leu Pro Leu Ala Gly Ile Pro Pro Gln Pro Ser Cys
                            40
Leu Lys Asn Ala Leu Pro Pro Ser Asp Leu Met Gly Thr Gly Pro Val
Phe Leu Asn Gly Val Arg Ala Pro Ser Asn His Asp Lys Asp Pro Leu
                                        75
Leu Asp Gln Ala Leu Val Lys Leu Leu Pro
<210> 2071
<211> 399
<212> DNA
<213> Homo sapiens
<400> 2071
acgcgtgtcc agcagactta gaaagcaggt tcctcttgtc atacagcacg ttaacatagc
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gctggcgctt tttacttttt gtgccaaact ctacacatga aacacttttg gaataactac
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gggaggttgt caggggatga gctgctcctg aggaagaggc agagatcaag cttcactcag
300
cagctggatt ctcacctagt ttatagactg aaatcctgca aggtggttac aacagtgaac
aatatgttca tacataaaga ctctaccctc aggtgatca
399
<210> 2072
<211> 100
<212> PRT
<213> Homo sapiens
<400> 2072
Met Thr Leu Ser Pro Leu Thr Ser Asp Ala Gly Ala Phe Tyr Phe Leu
                                    10
Cys Gln Thr Leu His Met Lys His Phe Trp Asn Asn Tyr Arg His Asp
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20
                                25
Phe Leu Tyr Leu Gly Lys Arg Arg Ala Leu Asn Gln Ile Arg Gly Trp
                            40
Glu Gly Arg Leu Ser Gly Asp Glu Leu Leu Leu Arg Lys Arg Gln Arg
                        55
Ser Ser Phe Thr Gln Gln Leu Asp Ser His Leu Val Tyr Arg Leu Lys
Ser Cys Lys Val Val Thr Thr Val Asn Asn Met Phe Ile His Lys Asp
                                    90
Ser Thr Leu Arg
            100
<210> 2073
<211> 339
<212> DNA
<213> Homo sapiens
<400> 2073
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cettecteca cetteaagee ageageggag geetgagtee tteteatgee atetetetgt
totototot gootootoot coacactgaa ggaccoctgt gatcacactg goocooccac
eggatgacce aggataatee atetecetgt ttgaaggteg getgattage aacetteatt
ccatctgcct ccttcattcc ccctggccat gtaatgggat tcacagcttc tggggattag
gacatggaca tcttgtggcg ggggcataat tctgtcgac
339
<210> 2074
<211> 85
<212> PRT
<213> Homo sapiens
<400> 2074
Met Lys Glu Ala Asp Gly Met Lys Val Ala Asn Gln Pro Thr Phe Lys
Gln Gly Asp Gly Leu Ser Trp Val Ile Arg Trp Gly Gly Gln Cys Asp
                                25
His Arg Gly Pro Ser Val Trp Arg Arg Gln Glu Arg Glu Gln Arg
                            40
Asp Gly Met Arg Arg Thr Gln Ala Ser Ala Ala Gly Leu Lys Val Glu
                        55
Glu Gly Ala Thr Ser Gln Gly Thr Gln Ala Ala Ser Arg Ser Trp Lys
Gly Thr Glu Val Asp
                85
<210> 2075
<211> 481
<212> DNA
<213> Homo sapiens
```

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<400> 2075
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481
<210> 2076
<211> 160
<212> PRT
<213> Homo sapiens
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Gly Leu Ser Glu Thr Lys Glu Leu Ser Cys Pro Glu Lys Ser Leu Phe
Glu Arg Asn Ser Arg His Thr Phe Ile Leu Ser Ala Pro Ala Gln Leu
                                                 45
                            40
Gly Leu Leu Arg Lys Ile Arg Leu Trp His Asp Ser Arg Gly Pro Ser
                        55
Pro Gly Trp Phe Ile Ser His Val Met Val Lys Glu Leu His Thr Gly
                                                             80
                                         75
Gln Gly Trp Phe Phe Pro Ala Gln Cys Trp Leu Ser Ala Gly Arg His
Asp Gly Arg Val Glu Arg Glu Leu Thr Cys Leu Gln Gly Gly Leu Gly
                                105
            100
Phe Trp Lys Leu Phe Tyr Cys Lys Phe Thr Glu Tyr Leu Glu Asp Phe
                            120
His Val Trp Leu Ser Val Tyr Ser Arg Pro Ser Ser Ser Arg Tyr Leu
                        135
His Thr Pro Arg Pro Thr Val Ser Phe Ser Leu Leu Cys Val Tyr Ala
                                         155
145
                    150
<210> 2077
<211> 1410
<212> DNA
<213> Homo sapiens
<400> 2077
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caaattgaac ccaactgttt gcgaattcgg cacgagtaaa gatcttttt tttttttgt
ttttttttt tttttttt ttttgctttc taaagtggct ttaatatcac acaagcggct
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cetecetege aagageagge ttgtgeacag eeeggeacag ggecagecag ggeggeeeet
geggetgtge agegettace agggggagga gttcagecat caggacettt tecaagtgga
600
tctgctggtc cagcacagcc actcgcagct tgagggccgc cagggtctgc agctcctggg
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gcgtgagcag gcagcggtac tcctgcatcc agtccatggg ggctgctgag agctcctccc
900
tcatgegeag teteageage gageaggeet teegeaggeg eccegeetee geetecaeet
ccacagcact gagcctgggc tggggcccgc ctgaagctgt ctgcatgttc tggaggaact
gggttttggc agcggcggca tccgtggaat cactggtctg tgtggaactg agctgggccc
acaggetega gttetgggaa getgetttee tgaatgeege aggeageege ageaggtgee
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ccccactga cagcagccgg cgctcagggt ggcccttggc aggcaccgtg gtctggcgga
ggcccttggt gggtctcgtg tctgaagcat ggccaccagc ttggcctggg gaatgcggtg
gggcggaggc tgtcgtgcca gaagaggtga
1410
<210> 2078
<211> 106
<212> PRT
<213> Homo sapiens
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<400> 2078 Gly His Leu Val Gln Phe Thr Arg Phe Pro Arg Glu Ala Gln Ala Ser Leu Gly Pro Arg Ala Gln Cys Gln Gly Arg His Pro Gln Ser Pro Ser 25 Glu Gln Ala Glu Gly Ser Met Gly Lys Ala Gln Thr Ala Gly Ser Ser Arg Arg Met Val Arg Thr Arg Ala Pro Pro Ser Gln Glu Gln Ala Cys 55 Ala Gln Pro Gly Thr Gly Pro Ala Arg Ala Ala Pro Ala Ala Val Gln 75 Arg Leu Pro Gly Gly Gly Val Gln Pro Ser Gly Pro Phe Pro Ser Gly Ser Ala Gly Pro Ala Gln Pro Leu Ala Ala 100 <210> 2079 <211> 565 <212> DNA <213> Homo sapiens <400> 2079 atttacctcg caaccgaccc tgatcgtgaa ggtgaaagca tcagctggca catccagcag gtactqqcqq tcaaatccta caaacgcatt accttcaacg agatcactct caagcgcgtt gaagaggcac tggccaatcc tcgacaaatc gatctgaaca gagttgcctc acaggaatgc eggegtgtge ttgacegett ggtggggtae etggtgacee aagagttgeg gegeetgatg ggcaaaccta cttccgctgg ccgcgttcaa tcacccgccg tgtttcttgt ggtcttgcgc gaacgcgaga tccgcaactt tcaggtgatc aatcactttg gcgtgcgtct gttctttgcc gatgtaagtc ggggcaccac ttggtatgcc gagtggcaac cggtaccgga tttcgcaagc aagcacttcc cctatgttca ggatagcaac ctggctcagc acgtcgccgg cactcgaaat gtggtcgtgg agtcctgcga ggatcgcaag gccgagcgtc atcctcctgc accattcatc tcatccactc ttcaacaggc cgcca 565 <210> 2080 <211> 188 <212> PRT <213> Homo sapiens <400> 2080 Ile Tyr Leu Ala Thr Asp Pro Asp Arg Glu Gly Glu Ser Ile Ser Trp His Ile Gln Gln Val Leu Ala Val Lys Ser Tyr Lys Arg Ile Thr Phe 25 Asn Glu Ile Thr Leu Lys Arg Val Glu Glu Ala Leu Ala Asn Pro Arg

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40
        35
Gln Ile Asp Leu Asn Arg Val Ala Ser Gln Glu Cys Arg Arg Val Leu
                        55
Asp Arg Leu Val Gly Tyr Leu Val Thr Gln Glu Leu Arg Arg Leu Met
                    70
Gly Lys Pro Thr Ser Ala Gly Arg Val Gln Ser Pro Ala Val Phe Leu
Val Val Leu Arg Glu Arg Glu Ile Arg Asn Phe Gln Val Ile Asn His
Phe Gly Val Arg Leu Phe Phe Ala Asp Val Ser Arg Gly Thr Thr Trp
                            120
                                                125
Tyr Ala Glu Trp Gln Pro Val Pro Asp Phe Ala Ser Lys His Phe Pro
                                            140
                        135
Tyr Val Gln Asp Ser Asn Leu Ala Gln His Val Ala Gly Thr Arg Asn
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Val Val Val Glu Ser Cys Glu Asp Arg Lys Ala Glu Arg His Pro Pro
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Ala Pro Phe Ile Ser Ser Thr Leu Gln Gln Ala Ala
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<211> 319
<212> DNA
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<210> 2082
<211> 106
<212> PRT
<213> Homo sapiens
<400> 2082
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Lys Met Met Thr Arg Phe His His Gln Arg Val Pro Leu Val Ile Leu
Val Cys Gly Thr Ala Cys Thr Gly Lys Ser Thr Ile Ala Thr Gln Leu
Ala Gln Arg Leu Asn Leu Pro Asn Val Leu Gln Thr Asp Met Val Tyr
Glu Leu Leu Arg Thr Ser Thr Asp Ala Pro Lèu Thr Ser Val Pro Val
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75
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Trp Ala Arg Asp Phe Asn Ser Pro Glu Glu Leu Ile Thr Glu Phe Cys
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<210> 2083
<211> 382
<212> DNA
<213> Homo sapiens
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caccageegg teattigige tgttgteege tigtggetga aaaaatgige ggatgaeagt
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382
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<211> 127
<212> PRT
<213> Homo sapiens
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Leu Tyr Thr Ile Ile Pro Thr Val Glu Cys Asn Cys Gly His Val Phe
Cys Phe Gly Cys Gly Leu Asp Gly His Gln Pro Val Ile Cys Ala Val
Val Arg Leu Trp Leu Lys Lys Cys Ala Asp Asp Ser Glu Thr Ser Asn
Trp Ile Gly Ala Asn Thr Lys Glu Cys Pro Lys Cys Cys Ser Thr Ile
                                        75
Glu Lys Asn Gly Gly Cys Asn His Met Thr Cys Arg Lys Cys Lys Tyr
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Glu Phe Cys Trp Ile Cys Ser Gly Pro Trp Ser Glu His Gly Asn Asn
Tyr Tyr Asn Cys Asn Arg Tyr Asp Glu Lys Ala Gly Asp Glu Gly
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<211> 478
<212> DNA
<213> Homo sapiens
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<211> 159
<212> PRT
<213> Homo sapiens
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Leu Tyr Pro His Met Thr Val Ala Asp Asn Met Gly Phe Ala Leu Lys
Leu Ala Lys Val Asp Lys Lys Glu Ile Arg Arg Arg Val Glu Glu Ala
Ala Glu Leu Leu Asp Leu Thr Asp Tyr Leu Asp Arg Lys Pro Lys Ala
                         55
Leu Ser Gly Gly Gln Arg Gln Arg Val Ala Met Gly Arg Ala Ile Val
                                         75
Arg Ser Pro Arg Val Phe Leu Met Asp Glu Pro Leu Ser Asn Leu Asp
                                     90
Ala Arg Leu Arg Val Arg Thr Arg Ala Gln Ile Ala Glu Leu Gln Arg
                                 105
Arg Leu Gly Thr Thr Thr Val Tyr Val Thr His Asp Gln Val Glu Ala
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Met Thr Met Gly Asp Arg Val Ala Val Leu Cys Ala Gly Lys Leu Gln
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Gln Val Asp Thr Pro Arg Asn Leu Phe Asp His Pro Ala Asn Ala
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<210> 2087
 <211> 731
 <212> DNA
 <213> Homo sapiens
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<212> PRT
<213> Homo sapiens
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Ala Ala Ala Val Asp Leu Gly Ile Lys Ala Thr Leu Ala Ala Thr
Ile Ile Pro Asn Ala Leu His Ser Ala Ala Phe Lys Asp Ala Val Val
Ala Asn Leu Val Ala Ala Gly Leu Thr Arg Ser Trp Gln Arg Leu Arg
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Leu Ser Pro Leu Pro Gln Leu Arg Ser Ile Pro Leu Ser Gly Arg Ser
Gln Arg Leu Arg Pro Leu Arg Leu Arg
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<211> 315
<212> DNA
<213> Homo sapiens
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315
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<211> 105
<212> PRT
<213> Homo sapiens
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Arg Asp Ser Arg Gln Pro Ile Ile Phe Asp Thr Asp His Phe Glu Gly
                            40
Tyr Glu Arg Pro Arg Leu Val Leu His Glu Val Thr Asp Gln Leu Gly
                        55
Gln Ala Phe Leu Val Leu Glu Gly Pro Glu Pro Ala Leu Gly Trp Glu
                                        75
Ser Leu Val Ala Ser Leu Thr Ser Leu Val Asp Ser Met Gly Ile Arg
Leu Thr Gly Ile Thr Asp Ser Ile Pro
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<212> DNA
<213> Homo sapiens
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322
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75

Val Gly Lys Asp Arg Ile Phe Asn Arg Arg Phe Leu Ala Leu Ala Asn

His Tyr Leu Phe Glu Pro Val Ala Cys Thr Pro Ala Ala Gly Trp Glu

70

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Lys Gly Gln Val Glu Asn Gln Val Arg Asn Ile Arg
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cgcgtggtgg gcgtgggttc agtgggcacc cactccctgg tactgctact gtccggcccc
aatgatgaac ctcttgtgct gcaagtgaaa gaagccctcc ccagtgtcct caccacccat
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attetgeagg cecaetegga teegetgetg gggtggaege gt
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<211> 134
<212> PRT
<213> Homo sapiens
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Thr Tyr Val Arg Thr Leu Pro Pro Ala Ala Asn Leu Leu Leu Lys Gln
Phe His Ile Val Asp Val Ala Arg Arg Val Val Gly Val Gly Ser Val .
Gly Thr His Ser Leu Val Leu Leu Leu Ser Gly Pro Asn Asp Glu Pro
Leu Val Leu Gln Val Lys Glu Ala Leu Pro Ser Val Leu Thr Thr His
                     70
Gly Lys Leu Pro Asp Ala Phe Ser Glu Leu Ser Ala Gly Asp Ser Ser
Gly Leu Leu Pro Asp Asn Leu Asp Lys His Ile Lys Ala Gly Asn Gly
                                 105
Tyr Arg Val Val Ala Cys Gln Gln Ile Leu Gln Ala His Ser Asp Pro
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Leu Leu Gly Trp Thr Arg
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 <213> Homo sapiens
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641
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Pro Pro Pro Glu Ala Glu Gln Ala Trp Pro Gln Ser Ser Gly Glu Glu
Glu Leu Gln Leu Gln Leu Ala Leu Ala Met Ser Lys Glu Glu Ala Asp
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Gln Val Leu Gly Val Gln Leu Gly Leu Ser Val Arg His Pro Pro Pro
Arg Leu Thr Ser Gly Ser Leu Pro Ala Arg Arg Gly Pro Gly Pro His
                    70
                                        75
Cys Arg Cys Ser Thr Cys Cys His Ser Ser Pro Pro Gln Ser Cys Leu
Ile Leu Thr Pro Pro Ser Leu Cys Val Ser Leu Ser Ala Cys Pro His
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            100
Trp Phe Arg Asp Pro Gln Pro Leu Phe Ile Arg Leu Tyr Leu Thr Leu
                                                125
Ala Leu Pro Leu Thr Leu Pro Leu Ala Pro Pro Val Met Pro Leu Thr
Leu Ser Leu Pro Gln Pro Pro Ser Cys Gly Pro Glu Asp Asp Ala Gln
                    150
                                        155
Leu Gln Leu Ala Leu Ser Leu Ser Arg Glu Glu His Asp Lys Val Arg
                                    170
                165
Ala Ala Ser Leu Ser Leu Pro Leu Pro Gly Ala Pro Leu Arg Pro Ala
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Pro Ser Pro Leu Pro Lys Ser Pro Pro Thr Ile Leu Leu Gly Pro Lys
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Pro Thr Gly Ser Arg
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Thr Cys Pro Arg Gly Ala Gln Trp Arg Gln Cys Pro Gly Leu Leu Cys
Pro Arg Val Cys Pro Gln Thr Ser Leu Pro Arg His Leu Leu His Asp
Pro Gly Gly Gly Arg Gln Trp Gln Tyr Ser Val Gln Val Ser Ser Glu
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Val Ala Gly Ala Trp Leu Arg Pro Cys Leu Thr Pro Thr Ala Ser Ala
Ser Ser Pro Leu Ala His Pro Thr Trp Pro
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<212> DNA
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60
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His Leu Asp Glu Leu Leu Thr Val Trp Leu Glu Thr Gly Thr Val Arg
                            40
Asp Gln Tyr Val Ala Arg Cys Asp Thr Ile Gly Thr Pro Val Arg Leu
                        55
Thr Phe Asp Pro Glu Ile Val Gly Gly Glu Gly Ala Ile Glu Gly
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Ile Gly Val Asp Val Asp Val Asp Gly Ala Ile Val Val Glu Thr Ser
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pro Ala Asn Ala Ser Gly Ser Ala Gly Gly Ser Asp Glu Ala Leu Asn
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Ser Gly Ile Leu Thr Ile Asp Val Thr Ser Val Ser Ser Ser Leu Gly
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                                        75
Gly Asn Leu Pro Ala Asn Asn Ser Ser Leu Gly Pro Met Glu Pro Leu
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Val Leu Val Ala His Ser Asp Ile Pro Pro Ser Leu Asp Ser Pro Leu
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            100
Val Leu Gly Thr Ala Ala Thr Val Leu Gln Gln Gly Ser Phe Ser Val
                            120
Asp Asp Val Gln Thr Val Ser Ala Gly Ala Leu Gly Cys Leu Val Ala
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                                            140
Leu Pro Met Lys Asn Leu Ser Asp Asp Pro Leu Ala Leu Thr Ser Asn
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                                        155
Ser Asn Leu Ala Ala His Ile Thr Thr Pro Thr Ser Ser Ser Thr Pro
                                    170
                165
Arg Glu Asn Ala Ser Val Pro Glu Leu Leu Ala Pro Ile Lys Val Glu
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            180
Pro Asp Ser Pro Ser Arg Pro Gly Ala Val Gly Gln Glu Gly Ser
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His Gly Leu Pro Gln Ser Thr Leu Pro Ser Pro Ala Glu Gln His Gly
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Ala Gln Asp Thr Glu Leu Ser Ala Gly Thr Gly Asn Phe Tyr Leu Val
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geeteaggee tggtgtetga aaacaccccc agacetgatg acageagage tategeteca
gcctccctcc aaatcaccag ttcttgttct ggtgaacccc tggacctgga ttccaaggat
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Ser Gly Leu Val Ser Glu Asn Thr Pro Arg Pro Asp Asp Ser Arg Ala
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Ile Ala Pro Ala Ser Leu Gln Ile Thr Ser Ser Cys Ser Gly Glu Pro
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Leu Asp Leu Asp Ser Lys Asp Val Ser Arg Pro Asp Ser Gln Gly Arg
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Pro Ala Lys Arg Arg Asn Glu Thr Ser Phe Leu Pro Ala Lys Lys Thr
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Ser Val Lys Glu Thr Gln Arg Thr Phe Lys Gly Asn Ala Gln Lys Met
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Phe Ser Pro Lys Lys His Ser Val Ser Thr Ser Asp Arg Asn Gln Glu
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Glu Arg Gln Cys Ile Lys Thr Ser Ser Leu Phe Lys Asn Asn Pro Asp
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Ile Pro Glu Leu His Arg Pro Val Val Lys Gln Val Gln Glu Lys Val
Phe Thr Ser Ala Ala Phe His Glu Leu Gly Leu His Pro His Leu Ile
                        135
Ser Thr Ile Asn Thr Val Leu Lys Met Ser Ser Met Thr Ser Val Gln
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Lys Gln Ser Ile Pro Val Leu Leu Glu Gly Arg Asp Ala Leu Val Arg
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Ser Gln Thr Gly Ser Gly Lys Ile Leu Ala Tyr Cys Ile Pro Val Val
                                185
Gln Ser Leu Gln Ala Met Glu Ser Lys Ile Gln Arg Ser Asp Gly Pro
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Tyr Ala Leu Val Leu Val Pro Thr Arg Glu Val Ser Arg Leu Pro Phe
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Gly Thr Ser Phe Lys His Met Leu Ser
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Gly Arg Gly Asn Lys Leu Ala Ile Ala Glu Leu Val Ala Leu Ala Glu
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Leu Phe Met Pro Ile Lys Leu Val Pro Lys Gln Phe Glu Gly Leu Val
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Glu Arg Val Arg Ser Ala Leu Glu Arg Leu Arg Ala Gln Glu Arg Ala
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180
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·	ctgtgcatgc	agcttacaac	agtgaactca	gcaaaagcac	tgaaagtgac
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	acggcgtggc	acctctgaag	gccacacacc	aagctgtcga	gggctttgtg
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Cys Gln Lys Leu Arg Asn Gln Thr Phe Phe Tyr Gln Thr Asp Glu Gln
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Asp Phe Thr Ser Cys Phe Ile Glu Thr Phe Lys Gln Trp Met Glu Asn
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Gln Asp Cys Asp Glu Pro Ala Leu Tyr Pro Cys Cys Ser His Trp Ser
Phe Pro Tyr Lys Gln Glu Ile Phe Glu Leu Cys Ile Lys Arg Ala Ile
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Gly Pro Arg Phe Asp Ile Asn Asp Thr Ile Arg Ala Val Leu Glu
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Phe Gln Ser Thr Tyr Leu Phe Thr Leu Ala Tyr Glu Lys Met His Gln
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Phe Tyr Lys Glu Val Asp Ser Trp Ile Ser Ser Glu Leu Ser Ser Ala
                               185
Pro Glu Gly Leu Ser Asn Gly Trp Phe Val Ser Asn Leu Glu Phe Tyr
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Asp Leu Gln Asp Ser Leu Ser Asp Gly Thr Leu Ile Ala Met Gly Leu
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Ser Val Ala Val Ala Phe Ser Val Met Leu Leu Thr Thr Trp Asn Ile
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	Inr	vai	GIY		Leu	vai	Leu	Leu		пр	Giu	rie a	ASII		Deu	GIU
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	Ser	Val	Thr	Ile	Ser	Val	Ala	Val	Gly	Leu	Ser	Val	Asp	Phe	Aļa	Val
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	Wi c	Tyr		Va I	λla	Tyr	Ara		Δla	Pro	Δsn	Pro	Acn	Ara	Glu	Glv
	HIS	-	GLY	Val	AIA	IYL	_	Deu	AIG	110	Y-2 P		ASP	9	<b>014</b>	O.L.y
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	Lys	Val	Ile	Phe	Ser	Leu	Ser	Arg	Val	Gly	Ser	Ala	Met	Ala	Met	Ala
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	Ser	Trp	Ala	Phe	Ala	Thr	Phe	Phe	Phe	Gln	Cys	Met	Cys	Arg	Cys	Leu
			355					360			-		365	_	•	
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٠	GIII	Ser	пуз	IIII		1111	116	MOII	AIG		1145	пси	ASP			O L Y
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	тте	Cys	Ser	GIU	Pne	Pne		ser	GIN	AIA	гÀг		Leu	GIY	Mec	PIO
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	Thr His His Cys Gly 545 His Lys	Phe Leu His 530 Val Pro	Ser Phe Asn 515 Gln Ala Ile Ala Gln 595	Ala Ser 500 Tyr Cys Pro Thr Gly 580 His	485 Leu Gly Ser Leu His 565 Met	Leu Asn Pro Pro Lys 550 Ile Gln Gln	Gln Gln His Thr 535 Ala His Asn Ala Ile	Arg Ser 520 Thr Thr His Ser Gln 600	Cys 505 Cys Ser His Cys Leu 585 Glu	490 Ser Gln Ser Gln Pro 570 Pro	Glu Cys Gln Phe Ala 555 Cys Arg	Pro Met Val 540 Val Leu Asn Gly	Asp Gly 525 Gln Glu Gln Phe Lys 605	Ala 510 Asp Ile Gly Gly Phe 590 Thr	495 Tyr Cys Gln Phe Arg 575 Leu Asn	Cys Lys Leu Asn Val 560 Val His
	Thr His His Cys Gly 545 His Lys	Phe Leu His 530 Val Pro Pro	Ser Phe Asn 515 Gln Ala Ile Ala Gln 595	Ala Ser 500 Tyr Cys Pro Thr Gly 580 His	485 Leu Gly Ser Leu His 565 Met	Leu Asn Pro Pro Lys 550 Ile Gln Gln	Gln Gln His Thr 535 Ala His Asn	Arg Ser 520 Thr Thr His Ser Gln 600	Cys 505 Cys Ser His Cys Leu 585 Glu	490 Ser Gln Ser Gln Pro 570 Pro	Glu Cys Gln Phe Ala 555 Cys Arg	Pro Met Val 540 Val Leu Asn Gly	Asp Gly 525 Gln Glu Gln Phe Lys 605	Ala 510 Asp Ile Gly Gly Phe 590 Thr	495 Tyr Cys Gln Phe Arg 575 Leu Asn	Cys Lys Leu Asn Val 560 Val His
	Thr His His Cys Gly 545 His Lys Pro	Phe Leu His 530 Val Pro Pro Val Ser 610	Ser Phe Asn 515 Gln Ala Ile Ala Gln 595 Leu	Ala Ser 500 Tyr Cys Pro Thr Gly 580 His	485 Leu Gly Ser Leu His 565 Met Ile Arg	Leu Asn Pro Pro Lys 550 Ile Gln Gln Ser	Gln Gln His Thr 535 Ala His Asn Ala Ile 615	Arg Ser 520 Thr Thr His Ser Gln 600 Glu	Cys 505 Cys Ser His Cys Leu 585 Glu	490 Ser Gln Ser Gln Pro 570 Pro Lys	Glu Cys Gln Phe Ala 555 Cys Arg Ile Leu	Pro Met Val 540 Val Leu Asn Gly Pro 620	Asp Gly 525 Gln Glu Gln Phe Lys 605 Lys	Ala 510 Asp Ile Gly Gly Phe 590 Thr	495 Tyr Cys Gln Phe Arg 575 Leu Asn Ala	Cys Lys Leu Asn Val 560 Val His Val Glu
	Thr His His Cys Gly 545 His Lys Pro His	Phe Leu His 530 Val Pro Pro Val Ser	Ser Phe Asn 515 Gln Ala Ile Ala Gln 595 Leu	Ala Ser 500 Tyr Cys Pro Thr Gly 580 His	485 Leu Gly Ser Leu His 565 Met Ile Arg	Leu Asn Pro Pro Lys 550 Ile Gln Gln Ser Cys	Gln Gln His Thr 535 Ala His Asn Ala Ile 615	Arg Ser 520 Thr Thr His Ser Gln 600 Glu	Cys 505 Cys Ser His Cys Leu 585 Glu	490 Ser Gln Ser Gln Pro 570 Pro Lys	Glu Cys Gln Phe Ala 555 Cys Arg Ile Leu Ser	Pro Met Val 540 Val Leu Asn Gly Pro 620	Asp Gly 525 Gln Glu Gln Phe Lys 605 Lys	Ala 510 Asp Ile Gly Gly Phe 590 Thr	495 Tyr Cys Gln Phe Arg 575 Leu Asn Ala	Cys Lys Leu Asn Val 560 Val His Val Glu Cys
	Thr His His Cys Gly 545 His Lys Pro His	Phe Leu His 530 Val Pro Pro Val Ser 610 Ser	Ser Phe Asn 515 Gln Ala Ile Ala Gln 595 Leu Ser	Ala Ser 500 Tyr Cys Pro Thr Gly 580 His Gln Phe	485 Leu Gly Ser Leu His 565 Met Ile Arg Val	Leu Asn Pro Pro Lys 550 Ile Gln Gln Ser Cys 630	Gln Gln His Thr 535 Ala His Asn Ala Ile 615 Arg	Arg Ser 520 Thr Thr His Ser Gln 600 Glu Ser	Cys 505 Cys Ser His Cys Leu 585 Glu Glu	490 Ser Gln Ser Gln Pro 570 Pro Lys His Gly	Glu Cys Gln Phe Ala 555 Cys Arg Ile Leu Ser 635	Pro Met Val 540 Val Leu Asn Gly Pro 620 Leu	Asp Gly 525 Gln Glu Gln Phe Lys 605 Lys Leu	Ala 510 Asp Ile Gly Gly Phe 590 Thr Met Lys	495 Tyr Cys Gln Phe Arg 575 Leu Asn Ala Thr	Cys Lys Leu Asn Val 560 Val His Val Glu Cys 640
	Thr His His Cys Gly 545 His Lys Pro His	Phe Leu His 530 Val Pro Pro Val Ser 610	Ser Phe Asn 515 Gln Ala Ile Ala Gln 595 Leu Ser	Ala Ser 500 Tyr Cys Pro Thr Gly 580 His Gln Phe	485 Leu Gly Ser Leu His 565 Met Ile Arg Val	Leu Asn Pro Pro Lys 550 Ile Gln Gln Ser Cys 630	Gln Gln His Thr 535 Ala His Asn Ala Ile 615 Arg	Arg Ser 520 Thr Thr His Ser Gln 600 Glu Ser	Cys 505 Cys Ser His Cys Leu 585 Glu Glu	490 Ser Gln Ser Gln Pro 570 Pro Lys His Gly Leu	Glu Cys Gln Phe Ala 555 Cys Arg Ile Leu Ser 635	Pro Met Val 540 Val Leu Asn Gly Pro 620 Leu	Asp Gly 525 Gln Glu Gln Phe Lys 605 Lys Leu	Ala 510 Asp Ile Gly Gly Phe 590 Thr Met Lys	495 Tyr Cys Gln Phe Arg 575 Leu Asn Ala Thr	Cys Lys Leu Asn Val 560 Val His Val Glu Cys 640
	Thr His His Cys Gly 545 His Lys Pro His Pro 625 Cys	Phe Leu His 530 Val Pro Pro Val Ser 610 Ser Asp	Ser Phe Asn 515 Gln Ala Ile Ala Gln 595 Leu Ser Pro	Ala Ser 500 Tyr Cys Pro Thr Gly 580 His Gln Phe Glu	485 Leu Gly Ser Leu His 565 Met Ile Arg Val Asn 645	Leu Asn Pro Pro Lys 550 Ile Gln Gln Ser Cys 630 Lys	Gln Gln His Thr 535 Ala His Asn Ala Ile 615 Arg Gln	Arg Ser 520 Thr Thr His Ser Gln 600 Glu Ser Arg	Cys 505 Cys Ser His Cys Leu 585 Glu Glu Thr	490 Ser Gln Ser Gln Pro Pro Lys His Gly Leu 650	Glu Cys Gln Phe Ala 555 Cys Arg Ile Leu Ser 635 Cys	Pro Met Val 540 Val Leu Asn Gly Pro 620 Leu Lys	Asp Gly 525 Gln Glu Gln Phe Lys 605 Lys Leu Asn	Ala 510 Asp Ile Gly Gly Phe 590 Thr Met Lys Arg	A95 Tyr Cys Gln Phe Arg 575 Leu Asn Ala Thr	Cys Lys Leu Asn Val 560 Val His Val Glu Cys 640 Val
	Thr His His Cys Gly 545 His Lys Pro His Pro 625 Cys	Phe Leu His 530 Val Pro Pro Val Ser 610 Ser	Ser Phe Asn 515 Gln Ala Ile Ala Gln 595 Leu Ser Pro	Ala Ser 500 Tyr Cys Pro Thr Gly 580 His Gln Phe Glu	485 Leu Gly Ser Leu His 565 Met Ile Arg Val Asn 645	Leu Asn Pro Pro Lys 550 Ile Gln Gln Ser Cys 630 Lys	Gln Gln His Thr 535 Ala His Asn Ala Ile 615 Arg Gln	Arg Ser 520 Thr Thr His Ser Gln 600 Glu Ser Arg	Cys 505 Cys Ser His Cys Leu 585 Glu Glu Thr	490 Ser Gln Ser Gln Pro Pro Lys His Gly Leu 650	Glu Cys Gln Phe Ala 555 Cys Arg Ile Leu Ser 635 Cys	Pro Met Val 540 Val Leu Asn Gly Pro 620 Leu Lys	Asp Gly 525 Gln Glu Gln Phe Lys 605 Lys Leu Asn	Ala 510 Asp Ile Gly Gly Phe 590 Thr Met Lys Arg	A95 Tyr Cys Gln Phe Arg 575 Leu Asn Ala Thr	Cys Lys Leu Asn Val 560 Val His Val Glu Cys 640 Val

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670
            660
                                665
Val Glu Leu Ser Leu Ser Gln Thr Asp Ala Ser Val Asn Ser Glu His
                            680
Phe Asn Gln Asn Glu Pro Lys Val Leu Phe Asn His Leu Met Gly Glu
                                            700
                        695
Ala Gly Cys Arg Ser Cys Pro Asn Asn Ser Gln Ser Cys Gly Arg Ile
                    710
                                        715
Val Arg Val Lys Cys Asn Ser Val Asp Cys Gln Met Pro Asn Met Glu
                                    730
                725
Ala Asn Val Pro Ala Val Leu Thr His Ser Glu Leu Ser Gly Glu Ser
            740
                                745
Leu Leu Ile Lys Thr Leu
        755
<210> 2115
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<212> DNA
<213> Homo sapiens
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ttctgggtat tccagaatct ggaatggggg atgcctatcc ccctcctgag cccacctgct
ggtcttgggt ccttggagcc caccaagtcc acaaccacct gctctgaata gaaagctgac
attgaaccga acagccgcgt cggaggggga tatctgtgga gagctgtgac tgggagccgg
tgtgtgcctt tctgtggtca tttctcgagt cctctgccgg ctgctgccag gtgaaggcat
ctccatgccc agccggtggg cagctggggc gggtggacct ccagcttctg cccgacgggg
ttcaqatqac cgagatccta cgggattgcc aatgtgtggg gacggggggc tttcaggggc
gggaaaacat gtccccatcc gtgggaagtg gagccacgtg g
461
<210> 2116
<211> 146
<212> PRT
<213> Homo sapiens
<400> 2116
Met Gly Thr Cys Phe Pro Ala Pro Glu Ser Pro Pro Ser Pro His Ile
                                    10
Gly Asn Pro Val Gly Ser Arg Ser Ser Glu Pro Arg Arg Ala Glu Ala
Gly Gly Pro Pro Ala Pro Ala Ala His Arg Leu Gly Met Glu Met Pro
                            40
Ser Pro Gly Ser Ser Arg Gln Arg Thr Arg Glu Met Thr Thr Glu Arg
                        55
His Thr Pro Ala Pro Ser His Ser Ser Pro Gln Ile Ser Pro Ser Asp
Ala Ala Val Arg Phe Asn Val Ser Phe Leu Phe Arg Ala Gly Gly Cys
```

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90
                85
Gly Leu Gly Gly Leu Gln Gly Pro Lys Thr Ser Arg Trp Ala Gln Glu
                                105
Gly Asp Arg His Pro Pro Phe Gln Ile Leu Glu Tyr Pro Glu Ala Pro
                            120
Ser Gly Arg Glu Gly Gly Val Ser Gly Glu Pro Ala Pro Arg Pro Glu
                                            140
                        135
Thr Arg
145
<210> 2117
<211> 360
<212> DNA
<213> Homo sapiens
<400> 2117
nnacgcgttg gggagacgac ggtgaccttc ccagcaagct catcgcagga tgaaacaatc
egegeeageg ttaagacett etegeggget gteacegeeg atetggagaa gtgtggaeeg
120
atcaggtgac actcgcggta gactgaatag atgcctgagt ctgaagacac tgtgtggctg
acceaagagg cettegataa geteaceeag gagetggagt aceteaaagg egaaggeege
acceptcatte ccaacaagat tecegacece cetteeggaag ecetette teagaacege
ggctaccatg ccgcccgtga ggagcagggg caggccgagg cccgcatccg tcaactcgag
360
<210> 2118
<211> 70
<212> PRT
<213> Homo sapiens
<400> 2118
Met Pro Glu Ser Glu Asp Thr Val Trp Leu Thr Gln Glu Ala Phe Asp
Lys Leu Thr Gln Glu Leu Glu Tyr Leu Lys Gly Glu Gly Arg Thr Val
Ile Ala Asn Lys Ile Ala Asp Ala Arg Ser Glu Gly Asp Leu Ser Glu
                            40
Asn Gly Gly Tyr His Ala Ala Arg Glu Glu Gln Gly Gln Ala Glu Ala
                        55
Arg Ile Arg Gln Leu Glu
<210> 2119
<211> 465
<212> DNA
<213> Homo sapiens
<400> 2119
nacgcgtgaa gggcgcgtgt cggcctctca ctggcgcagc ctgcactgcc gctgccgcct
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cgcccgccc ttgccttggc gttgtctctg gcactgtggc ggactgacca cggcccgggc
atgggctgca agggagacgc gagcggagtt tgctataaaa tgggagttct ggttgtactc
actgttctgt ggctgttctc ctcagtaaag gccgactcaa aagccattac aacctctctt
acaacaaaat ggttttccac tccattgttg ttagaagcca gtgagttttt agcagaagac
agtcaagaga aattttggaa ttttgtagaa gccagtcaaa atattggatc atcagatcat
gacggtaccg attattccta ctatcatgca atattggagg ctgcatttca gtttctgtca
ccccccagc agaatttgtt taaattttgt ctgtcccttc acgcg
<210> 2120
<211> 115
<212> PRT
<213> Homo sapiens
<400> 2120
Met Gly Cys Lys Gly Asp Ala Ser Gly Val Cys Tyr Lys Met Gly Val
Leu Val Val Leu Thr Val Leu Trp Leu Phe Ser Ser Val Lys Ala Asp
Ser Lys Ala Ile Thr Thr Ser Leu Thr Thr Lys Trp Phe Ser Thr Pro
Leu Leu Glu Ala Ser Glu Phe Leu Ala Glu Asp Ser Gln Glu Lys
Phe Trp Asn Phe Val Glu Ala Ser Gln Asn Ile Gly Ser Ser Asp His
                    70
Asp Gly Thr Asp Tyr Ser Tyr Tyr His Ala Ile Leu Glu Ala Ala Phe
Gln Phe Leu Ser Pro Leu Gln Gln Asn Leu Phe Lys Phe Cys Leu Ser
                                105
                                                    110
            100
Leu His Ala
        115
<210> 2121
<211> 336
<212> DNA
<213> Homo sapiens
<400> 2121
ccggacaagg tcaatggaat gaaaacctcc cggccgacag acaatagtat aaatgttaca
tgtggtcctc cttatgaaac taatggccct aaaacctttt acattttggt agtcagaagt
ggaggttctt ttgttacaaa atacaacaag acaaactgtc agttttatgt agataatctc
180
tactattcaa ctgactatga gtttctggtc tcttttcaca atggagtgta cgagggagat
tcagttataa gaaatgagtc aacaaatttt aatgctaaag ccctgattat attcctggtg
```

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tttctgatta ttgtgacatc aatagccttg cttgtt
<210> 2122
<211> 112
<212> PRT
<213> Homo sapiens
<400> 2122
Pro Asp Lys Val Asn Gly Met Lys Thr Ser Arg Pro Thr Asp Asn Ser
Ile Asn Val Thr Cys Gly Pro Pro Tyr Glu Thr Asn Gly Pro Lys Thr
                                25
Phe Tyr Ile Leu Val Val Arg Ser Gly Gly Ser Phe Val Thr Lys Tyr
                            40
Asn Lys Thr Asn Cys Gln Phe Tyr Val Asp Asn Leu Tyr Tyr Ser Thr
Asp Tyr Glu Phe Leu Val Ser Phe His Asn Gly Val Tyr Glu Gly Asp
Ser Val Ile Arg Asn Glu Ser Thr Asn Phe Asn Ala Lys Ala Leu Ile
                                    90
Ile Phe Leu Val Phe Leu Ile Ile Val Thr Ser Ile Ala Leu Leu Val
                                105
            100
<210> 2123
<211> 426
<212> DNA
<213> Homo sapiens
<400> 2123
aactgggccg agttcggcaa cctgcacccg ttcgccccgg ccgagcaaag cgctggttat
cagcaactga ccgacgaact ggaagcgatg ctctgcgccg ccacaggtta tgacgcgatc
tecetgeage egaacgetgg eteceaggge gagtacgeeg gtetgetgge gateegeget
taccaccaga geogtggega tgagegtege gacatetgee tgatteegte etetgeeeac
ggcaccaacc cggcaaccgc caacatggcc ggcatgcgcg tggtcgtgac cgcttgcgac
300
gcccgcggca acgtcgacat cgaagacctg cgcgccaagg ctatcgagca ccgcgaacac
ctcgcggcgc tgatgatcac ctacccgtcg acccacggcg tgttcgaaga aggcatccgc
420
gagatc
426
<210> 2124
<211> 142
<212> PRT
<213> Homo sapiens
<400> 2124
Asn Trp Ala Glu Phe Gly Asn Leu His Pro Phe Ala Pro Ala Glu Gln
```

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10
Ser Ala Gly Tyr Gln Gln Leu Thr Asp Glu Leu Glu Ala Met Leu Cys
                                25
Ala Ala Thr Gly Tyr Asp Ala Ile Ser Leu Gln Pro Asn Ala Gly Ser
                            40
Gln Gly Glu Tyr Ala Gly Leu Leu Ala Ile Arg Ala Tyr His Gln Ser
Arg Gly Asp Glu Arg Arg Asp Ile Cys Leu Ile Pro Ser Ser Ala His
                    70
Gly Thr Asn Pro Ala Thr Ala Asn Met Ala Gly Met Arg Val Val Val
                                    90
Thr Ala Cys Asp Ala Arg Gly Asn Val Asp Ile Glu Asp Leu Arg Ala
                                105
Lys Ala Ile Glu His Arg Glu His Leu Ala Ala Leu Met Ile Thr Tyr
                            120
Pro Ser Thr His Gly Val Phe Glu Glu Gly Ile Arg Glu Ile
                        135
    130
<210> 2125
<211> 285
<212> DNA
<213> Homo sapiens
<400> 2125
ngtatggcat ctgctgcttc aagttttgtg gtgacaccaa atgtcacttc taacacaacc
acagtcaagc ccaatatggt tatgttacct attcaaaaca caagaggttc aagattggtt
120
ctaaaggcgg ctgaagacgc ggcaccaccg gctgtcaccg ttgaagcggc caaggaagag
aageegaage caccaccaat tggaeetaag agaggageea aggtgagaat tettaggaag
gagtcatact ggttcaaagg agtgggatca gttgtgactg ttgat
<210> 2126
<211> 95
<212> PRT
<213> Homo sapiens
<400> 2126
Xaa Met Ala Ser Ala Ala Ser Ser Phe Val Val Thr Pro Asn Val Thr
Ser Asn Thr Thr Thr Val Lys Pro Asn Met Val Met Leu Pro Ile Gln
                                 25
Asn Thr Arg Gly Ser Arg Leu Val Leu Lys Ala Ala Glu Asp Ala Ala
Pro Pro Ala Val Thr Val Glu Ala Ala Lys Glu Glu Lys Pro Lys Pro
Pro Pro Ile Gly Pro Lys Arg Gly Ala Lys Val Arg Ile Leu Arg Lys
                                         75
                    70
Glu Ser Tyr Trp Phe Lys Gly Val Gly Ser Val Val Thr Val Asp
                                     90
                85
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<210> 2127
<211> 454
<212> DNA
<213> Homo sapiens
<400> 2127
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gcgacgcata ttccagggca cttgtcacca gtcatgccat tgggtaccat gaacccatgc
atquartact quatgatgua acaggggett gocagettga tggegtgtcc gtccctgatg
ctgcagcaac tgttggcctt accgcttcag acgatgccag tgatgatgcc acagatgatg
acgcctaaca tgatgtcacc attgatgatg ccgagcatga tgtcaccaat ggtcttgccg
agcatgatgt cgcaaatgat gatgccacaa tgtcactgcg acgccgtctc gcagattatg
ctgcaacage agttaccatt catgttcaac ccaatggcca tgacgattcc acceatgttc
ttacagcaac cctttgttgg tgctgcattc taga
454
<210> 2128
<211> 150
<212> PRT
<213> Homo sapiens
<400> 2128
Met Ala Ala Lys Met Leu Ala Leu Phe Ala Leu Leu Ala Leu Cys Ala
Ser Ala Thr Ser Ala Thr His Ile Pro Gly His Leu Ser Pro Val Met
Pro Leu Gly Thr Met Asn Pro Cys Met Gln Tyr Cys Met Met Gln Gln
                            40
Gly Leu Ala Ser Leu Met Ala Cys Pro Ser Leu Met Leu Gln Gln Leu
Leu Ala Leu Pro Leu Gln Thr Met Pro Val Met Met Pro Gln Met Met
Thr Pro Asn Met Met Ser Pro Leu Met Met Pro Ser Met Met Ser Pro
                                    90
Met Val Leu Pro Ser Met Met Ser Gln Met Met Pro Gln Cys His
                                105
Cys Asp Ala Val Ser Gln Ile Met Leu Gln Gln Leu Pro Phe Met
                            120
Phe Asn Pro Met Ala Met Thr Ile Pro Pro Met Phe Leu Gln Gln Pro
                        135
Phe Val Gly Ala Ala Phe
145
                    150
<210> 2129
<211> 354
<212> DNA
<213> Homo sapiens
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<400> 2129
acgcgtgact tggtgaacaa acccatatcc atcacccct tcggtgttga tacggaaata
ctcacgccct ttgacaagcg gcgtgatgcg aacggcggtg acggggtggt gcgcatcggg
actatcaagg ctctccactc caaatatggg atcggtgaac tcatccgtgc cttcagtcgg
gtccatgatg aacggcctaa taccgtcctt cgtatctggg gcggcggccc agacgagaat
cccctcaagg tcttggctcg ccgtcttgtc ccggacggtt cggtggagtt tcgcggtgcc
attgatcatt ctgaggtcag aaatgccttg ggtagtttgg acatctttgc cgcc
<210> 2130
<211> 118
<212> PRT
<213> Homo sapiens
<400> 2130
Thr Arg Asp Leu Val Asn Lys Pro Ile Ser Ile Thr Pro Phe Gly Val
Asp Thr Glu Ile Leu Thr Pro Phe Asp Lys Arg Arg Asp Ala Asn Gly
Gly Asp Gly Val Val Arg Ile Gly Thr Ile Lys Ala Leu His Ser Lys
Tyr Gly Ile Gly Glu Leu Ile Arg Ala Phe Ser Arg Val His Asp Glu
Arg Pro Asn Thr Val Leu Arg Ile Trp Gly Gly Gly Pro Asp Glu Asn
                    70
                                        75
Pro Leu Lys Val Leu Ala Arg Arg Leu Val Pro Asp Gly Ser Val Glu
                                    90
Phe Arg Gly Ala Ile Asp His Ser Glu Val Arg Asn Ala Leu Gly Ser
            100
                                105
Leu Asp Ile Phe Ala Ala
        115
<210> 2131
<211> 324
<212> DNA
<213> Homo sapiens
<400> 2131
gcatcgcggc cattggttat gtgtgcctat tccattggtt atgtggaagg ttgggatcag
ccagacagtc attatgatgg tttgttacag ctgggcgagt ggggctttcg aatcaatgac
ctgatgaaga cggtagaggg cgcggcaggg tgcattgagt attatgaaat gctcaacgaa
caacgccccg acttgtctta tgacatagac ggtattgttt ataaagttga tcagattgac
ctgcaagaag agcttggttt tattgctcgt gcgccacgct gggcaattgc tcgaaaattt
300
```

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cctgctcaag aagaagttac gcgt
324
<210> 2132
<211> 108
<212> PRT
<213> Homo sapiens
<400> 2132
Ala Ser Arg Pro Leu Val Met Cys Ala Tyr Ser Ile Gly Tyr Val Glu
Gly Trp Asp Gln Pro Asp Ser His Tyr Asp Gly Leu Leu Gln Leu Gly
                                25
Glu Trp Gly Phe Arg Ile Asn Asp Leu Met Lys Thr Val Glu Gly Ala
                            40
Ala Gly Cys Ile Glu Tyr Tyr Glu Met Leu Asn Glu Gln Arg Pro Asp
Leu Ser Tyr Asp Ile Asp Gly Ile Val Tyr Lys Val Asp Gln Ile Asp
Leu Gln Glu Glu Leu Gly Phe Ile Ala Arg Ala Pro Arg Trp Ala Ile
                                    90
Ala Arg Lys Phe Pro Ala Gln Glu Glu Val Thr Arg
                                105
            100
<210> 2133
<211> 292
<212> DNA
<213> Homo sapiens
<400> 2133
qqtacctqca atatgqtatt gcatgacatg aataaatttt tccttactct gaactcacta
gtggctgtct ttagaggacc cggcgaactt ttcctgcttt ttcccacttg ctccatcaca
tacatcacat caccaacacc catcacatac atacacagtc atgaacggcc atcaggccac
accapattac atogotyty atocaaccot goattttcct goccotcott tactgogagt
gtcacctcta cccggaaagg tcttcaacct ccaagtttcc cagtaattta tt
292
<210> 2134
<211> 93
<212> PRT
<213> Homo sapiens
<400> 2134
Met Val Leu His Asp Met Asn Lys Phe Phe Leu Thr Leu Asn Ser Leu
Val Ala Val Phe Arg Gly Pro Gly Glu Leu Phe Leu Leu Phe Pro Thr
                                25
Cys Ser Ile Thr Tyr Ile Thr Ser Pro Thr Pro Ile Thr Tyr Ile His
Ser His Glu Arg Pro Ser Gly His Thr Arg Leu His Arg Cys Gly Ser
```

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55
    50
Asn Pro Ala Phe Ser Cys Pro Ser Phe Thr Ala Ser Val Thr Ser Thr
                    70
                                        75
Arg Lys Gly Leu Gln Pro Pro Ser Phe Pro Val Ile Tyr
<210> 2135
<211> 439
<212> DNA
<213> Homo sapiens
<400> 2135
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actocgagog togacoaaat ogagatgoat cootegttoa accaggogac ottocgogoa
gagetggeeg agegeggear taacceggag geetggagee egetgggeea gtegaaggae
ctcqacaatc ccqtcctcac cqatatttcc aaggcgactg gaaagacgcc tgcccaggtg
gtcattcgct ggcacctgca gatcggcaac gtggtattcc ccaagtcggt gacaccatca
cgaattgccg agaactttga tgtgttcgat ttcgagctgt ctgacgagca gatcgccgca
attgatggcc tggatcacgg caacaggctc ggtggtgacc cttctaccgc cgacttctga
ttctgcaaca ataaccggt
439
<210> 2136
<211> 139
<212> PRT
<213> Homo sapiens
<400> 2136
Thr Arg Ser Ile Gly Val Ser Asn Phe Lys Thr Glu His Leu Asp Ala
Ile Glu Gly Ala Thr Pro Ser Val Asp Gln Ile Glu Met His Pro Ser
Phe Asn Gln Ala Thr Phe Arg Ala Glu Leu Ala Glu Arg Gly Ile Asn
Pro Glu Ala Trp Ser Pro Leu Gly Gln Ser Lys Asp Leu Asp Asn Pro
                        55
                                             60
Val Leu Thr Asp Ile Ser Lys Ala Thr Gly Lys Thr Pro Ala Gln Val
                                         75
                    70
Val Ile Arg Trp His Leu Gln Ile Gly Asn Val Val Phe Pro Lys Ser
                                     90
                85
Val Thr Pro Ser Arg Ile Ala Glu Asn Phe Asp Val Phe Asp Phe Glu
                                105
Leu Ser Asp Glu Gln Ile Ala Ala Ile Asp Gly Leu Asp His Gly Asn
Arg Leu Gly Gly Asp Pro Ser Thr Ala Asp Phe
    130
                        135
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<211> 330
<212> DNA
<213> Homo sapiens
<400> 2137
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teegggacag agatggetgg eggageetgg ggeegeetgg eetgttaett ggagtteetg
aagaaggagg agetgaagga gttecagett etgetegeea ataaagegea etecaggage
tetteeggtg agacaceege teagecagag aagacgagtg geatggaggt ggeetegtae
ctggtggctc agtatgggga gcagcgggcc tgggacctag ccctccatac ctgggagcag
atggggctga ggtcactgtg cgcccaagcc
330
<210> 2138
<211> 86
<212> PRT
<213> Homo sapiens
<400> 2138
Met Ala Gly Gly Ala Trp Gly Arg Leu Ala Cys Tyr Leu Glu Phe Leu
Lys Lys Glu Glu Leu Lys Glu Phe Gln Leu Leu Ala Asn Lys Ala
His Ser Arg Ser Ser Ser Gly Glu Thr Pro Ala Gln Pro Glu Lys Thr
                            40
Ser Gly Met Glu Val Ala Ser Tyr Leu Val Ala Gln Tyr Gly Glu Gln
                        55
Arg Ala Trp Asp Leu Ala Leu His Thr Trp Glu Gln Met Gly Leu Arg
                                        75
65
Ser Leu Cys Ala Gln Ala
<210> 2139
<211> 433
<212> DNA
<213> Homo sapiens
<400> 2139
gagcagttga gcgcccagaa caccgggatc aacagcaacc tgtcggacat ggccggccag
gtgaacaagc tggcgagtac catcgcccag tacaacgatc agatttccaa agtcaccacc
geogeoggtg coccqaacqa cotgetggac cagegeageg aggeggtgeg ccagttgtee
gagetggteg ggaeecaggt ggteeagege ggttegagtt atgaegteta tateggeage
ggtcagcgcc tggtgatggg caacagcacc aacaccctgt ccgcagtgcc gagcaaggac
300
```

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gacccgagcc agtcggcctt gcagctggat cgcggcacca gcaccgtcga tatcacctcc
acggtgaccg gtggcgagat cggtggtctg ctgcgctatc gcagcgatgt gctcgacccg
tcgatcaacg cgt
433
<210> 2140
<211> 144
<212> PRT
<213> Homo sapiens
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Asp Gln Ile Ser Lys Val Thr Thr Ala Ala Gly Ala Pro Asn Asp Leu
Leu Asp Gln Arg Ser Glu Ala Val Arg Gln Leu Ser Glu Leu Val Gly
Thr Gln Val Val Gln Arg Gly Ser Ser Tyr Asp Val Tyr Ile Gly Ser
                                         75
Gly Gln Arg Leu Val Met Gly Asn Ser Thr Asn Thr Leu Ser Ala Val
Pro Ser Lys Asp Asp Pro Ser Gln Ser Ala Leu Gln Leu Asp Arg Gly
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Thr Ser Thr Val Asp Ile Thr Ser Thr Val Thr Gly Gly Glu Ile Gly
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Gly Leu Leu Arg Tyr Arg Ser Asp Val Leu Asp Pro Ser Ile Asn Ala
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<212> DNA
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426
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Gly Ala Thr Ala Val Tyr Pro Tyr Leu Ser Phe Arg Leu Ile Asn Asp
Met Val Asp Lys Gly Glu Val Leu Gly Asp Pro Ile Ala Cys His Val
                            40
Lys Tyr Arg Lys Gly Ile Asn Lys Gly Leu Met Lys Ile Leu Ser Lys
                        55
Met Gly Ile Ser Thr Ile Ala Ser Tyr Arg Gly Ala Gln Leu Phe Glu
Ala Val Gly Leu Asp Thr Lys Val Val Asp Leu Cys Phe Lys Gly Val
Ala Ser Arg Ile Lys Gly Ala Arg Phe Glu Asp Phe Gln Arg Asp Gln
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Ala Thr Ile Ala Asn Asn Ala Trp Lys Leu Arg Lys Pro Ile Gln Gln
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Gly Gly Tyr Leu Lys Tyr Val His Asp Ser Glu Tyr His Ala
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480
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gctcggtggg cgatgcaggc gctggccagt gccgacctat tcagcaatgc taaggacgcc
660
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285
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Asp Lys Cys Ser Ile Glu Ser Ala Tyr Leu Leu Arg Tyr Ser Gly Asn
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Trp Ala Trp
305
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<211> 389
<212> DNA
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ttatttagct cggcccagcc ttctgctgaa caactaaaat tgattaaaga gtttggttgt
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389
<210> 2146
<211> 109
<212> PRT
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Ile His Glu His Leu Phe Ser Ser Ala Gln Pro Ser Ala Glu Gln Leu
                                25
Lys Leu Ile Lys Glu Phe Gly Cys Ser Thr Val Ile Asn Leu Ala Leu
Thr Asn Ala Ser Asn His Leu Glu Asn Glu Asp Arg Ile Cys Leu Asp
                        55
Leu Gly Leu Asn Tyr Ile His Ile Pro Ile Asp Trp Glu Met Pro Ser
Ala Glu Gln Cys Leu Leu Val Leu Asp Leu Ile Asp His Leu Val Gln
                                    90
Asn Glu Ile Val Trp Ile His Cys Ala Lys Asn Lys Arg
                                105
            100
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<212> DNA
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160
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                    150
145
Lys Glu Gln Phe Gly Trp Pro Asp Glu Pro Pro Glu Glu Phe Pro Ser
                                    170
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Ala Ser Val Ser Asn Ile Cys Pro Ser Asn Leu Asn Gln Ser Asn Gly
                                185
            180
Thr Gly Asp Ser Asp Ser Ala Ala Pro Thr Thr Ser Gly Thr Val
                                                205
                            200
Leu Glu Arg Leu Val Val Ser Ser Leu Glu Ala Leu Glu Ser Cys Phe
Ala Val Gly Pro Ile Ile Glu Lys Glu Arg Asn Lys Asn Ala Ala Gln
                    230
                                        235
Glu Leu Ala Thr Leu Leu Leu Ser Leu Pro Ala Pro Ala Ser Val Gln
                                    250
                245
Gln Gln Ser Lys Ser Leu Leu Ala Ser Leu His Thr Ser Arg Ser Ala
                                265
            260
Tyr His Ser His Lys Val Thr Val Leu Ser Gly Lys Gly Asn Cys Ser
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Ala Asp Arg Glu Ser Asn Lys Leu Ala Leu His Cys Lys Ala Thr Ala
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<212> DNA
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511
<210> 2152
<211> 170
<212> PRT
<213> Homo sapiens
<400> 2152
Ala Gly Val Tyr Leu Trp Gly Pro Val Gly Arg Gly Lys Thr Trp Leu
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His Phe His His Phe Met Gly Trp Val His Gln Arg Ser Phe Gln Leu
Thr Gly Ile Ala Asp Pro Leu Arg Ala Leu Ala Arg Glu Leu Ala Ala
Glu Val Arg Val Leu Cys Phe Asp Glu Leu Phe Val Asn Asp Ile Gly
Asp Ala Ile Ile Leu Gly Arg Leu Phe Gln Val Met Phe Asp Ala Gly
                                    90
Val Val Val Cys Thr Ser Asn Leu Pro Pro Asp Gln Leu Tyr Ala
                                105
            100
Asp Gly Phe Asn Arg Asp Arg Phe Leu Pro Ala Ile Thr Ala Ile Lys
Gln His Met Gln Val Val 3la Val Asn Gly Ala Glu Asp His Arg Leu
His Pro Gly Ala Ile Glu Gln Arg Tyr Trp Val Ala Leu Pro Glu Gln
                                        155
Gly Ser Ala Leu Ser Gln Val Phe Asp Ala
                165
<210> 2153
<211> 528
<212> DNA
<213> Homo sapiens
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528
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<213> Homo sapiens
<400> 2154
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Met Ser Val Asp Pro Gln His Leu Leu Arg Glu Leu Phe Ala Thr Ala

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Ile Asp Ala Ala His Pro Arg His Val Leu Glu Pro Tyr Leu Pro Ala
                                25
Asp Arg Thr Gly Arg Val Ile Val Ile Gly Pro Gly Lys Thr Ala Pro
                            40
Ala Met Ala Leu Val Val Glu Asn Gly Trp Gln Gly Glu Val Thr Gly
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Leu Val Val Thr Arg Tyr Gly His Gly Ala Pro Cys Lys Lys Ile Glu
                    70
Val Val Glu Ala Ala His Pro Val Pro Asp Ala Ala Gly Leu Ala Val
                                    90
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<211> 297
<212> DNA
<213> Homo sapiens
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<211> 91
<212> PRT
<213> Homo sapiens
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Cys Glu Val Leu Thr Val Thr Asp Ser Glu Gly Asn Pro Leu Ser Ser
Val Leu Ser Phe Tyr Phe Arg Asp Glu Val Leu Pro Tyr Tyr Ala Gly
                            40
Asp Ala Val Ala Ala Arg Glu Leu Ala Ala Asn Asp Phe Lys Tyr Trp
                        55
Glu Leu Met Arg Arg Ala Cys Ala Arg Gly Leu Lys Val Phe Asp Tyr
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Gly Arg Ser Lys Gln Gly Thr Gly Ser Tyr Ala
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<210> 2157
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<212> DNA
<213> Homo sapiens
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<400> 2157

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catqccqcaq ccqqaqaqct gctgtacgcg tataacatcg tgcggccacg cgctgtgatg
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gegegtggtt ttgeegaggg egaeteggte ttegeggaga teaecgaeca gategteaec
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711
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<211> 237
<212> PRT
<213> Homo sapiens
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Pro Leu Ser Ala Leu Ala Arg Ile Ala Asn Arg Glu His Arg Asp Ile
                                25
Glu Val Gly Glu Gly Asp Thr Val Leu Leu Ala Ser Ser Leu Ile Pro
Gly Asn Glu Asn Ala Val Tyr Arg Val Ile Asn Gly Leu Thr Lys Leu
Gly Ala Ala Val Val His Lys Gly Asn Ala Leu Val His Val Ser Gly
                    70
                                        75
His Ala Ala Ala Gly Glu Leu Leu Tyr Ala Tyr Asn Ile Val Arg Pro
                                    90
Arg Ala Val Met Pro Ile His Gly Glu Val Arg His Leu Val Ala Asn
                                105
            100
Ala Asp Leu Ala Lys Ala Thr Gly Val Asp Glu Asn Asn Val Val Leu
                            120
Val Glu Asp Gly Gly Val Ile Asp Leu Val Asp Gly Val Pro Arg Val
Val Gly Lys Val Asp Ala Ser Tyr Ile Leu Val Asp Gly Ser Gly Val
                                        155
Gly Glu Leu Thr Glu Asp Thr Leu Thr Asp Arg Arg Ile Leu Gly Glu
                165
                                    170
Glu Gly Phe Leu Ser Val Val Thr Val Val Asp Thr Arg Ser Ala Ser
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190
                                185
            180
Val Val Ser Arg Pro Ala Ile Gln Ala Arg Gly Phe Ala Glu Gly Asp
                            200
Ser Val Phe Ala Glu Ile Thr Asp Gln Ile Val Thr Glu Leu Glu Lys
                        215
Ala Met Ala Gly Gly Met Asp Asp Thr His Arg Leu Gln
                    230
<210> 2159
<211> 322
<212> DNA
<213> Homo sapiens
<400> 2159
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ggcagcaget ccagggggggg cetgggaggg etttgtgcag aagaageetg ttteetteta
cctgtttgga aaagttgtct ctgcagatgg tgggtgagag ttcgctgcca gggccactgt
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tgggggcctt ctggttctcc tt
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<211> 100
<212> PRT
<213> Homo sapiens
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Lys Lys Cys Pro Gln Gly Arg Glu Asp Ser Gly Pro Gly Ser Glu Leu
Ser Pro Thr Ile Cys Arg Asp Asn Phe Ser Lys Gln Val Glu Gly Asn
                        55
Arg Leu Leu His Lys Ala Leu Pro Gly Arg Pro Trp Ser Cys Cys
                                        75
                    70
Pro Ala Ser Trp Cys Pro Phe Thr Arg Cys Arg Leu Ser Arg Gly Trp
Ser Val Leu Ala
            100
<210> 2161
<211> 1070
<212> DNA
<213> Homo sapiens
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<400> 2161

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ggctatacag gggaagcctc caaagggaaa tctggaaaaa tgttctgaga gggacattaa
ggatgtactc agaaattaag aaaacatatt aggacttgcc aaaagtgaga gaagcaactg
aggagactta tatgcaaaaa tcgcaaagaa ggagagaaca aaagatggag gttggatgct
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tggctagctg agtaaaggac catcgtataa aacagacaaa agttaagact agatggagtg
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1070
<210> 2162
<211> 145
<212> PRT
<213> Homo sapiens
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Ile Thr Leu Ile Gln Glu Trp Phe Leu Tyr Pro Pro Val Asn Thr Cys
Leu Ser Ser His Pro Leu Thr Ser Ala Gly Thr Leu His Phe Leu
Leu Pro Phe Leu Ser Ser Ser Phe Cys Pro Arg Glu Ser Cys Cys Tyr
                        55
Ile Phe Cys Val Pro Pro Ser Phe Ser Cys His Leu Cys Val Ile Leu
                    70
65
                                        75
Arg Asp Ser Met Gly Ser Ser Gly Tyr Ser Pro Pro His Gly His Ser
```

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85
                                    90
Leu Leu Ser Pro Leu Pro Ser Ala Leu Cys His Ile Leu His Cys Ile
                                105
Cys Leu Cys Ser Gln Ile Cys Leu His Phe His Arg Ile Leu Ala Thr
                            120
Gly Leu Pro Phe Met Pro Ile Pro Phe Ser Leu Ser His Leu Ser Pro
                        135
Tyr
145
<210> 2163
<211> 657
<212> DNA
<213> Homo sapiens
<400> 2163
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tggttccggg ttggaaggtt gggtgaaatg ggaaccgaat accaatttca cccgggaacc
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cagacaggag teegteeegt ecagteeeat cateecaaga aacateegge eegaeteeet
gcagetecat ggeteaacaa ggtgeggatg cetgetggae etggetgett tecatecaae
tttgatccct tccccaagag gaagagtgct acctagggac aagtgtggtg cgcacaggca
tgcagcctgg tctcttgctc aggcggcttg cgcagattcc tagaggaatc tgcagcg
657
<210> 2164
<211> 152
<212> PRT
<213> Homo sapiens
<400> 2164
Met Pro Met Ile Thr Ala Lys Leu Gly Pro Lys Leu Gly Ser Ile Ser
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Thr Gly Gly Gln Trp Gly Gly Ile Gly Leu Ser Pro Leu Pro Ala Phe
Leu Arg Pro Arg Ala Pro Ser Asp Met Pro Arg Gly Ser Leu Ser Arg
Arg Ala Thr Cys Glu Thr His Pro Ala Cys Ser Ser His His Cys Ala
Gln Thr Ser Ala Trp Ala Pro Glu Arg Glu Gly Ala Glu Gly Leu Arg
```

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65
                    70
                                                            80
Gln Glu Ser Val Pro Ser Ser Pro Ile Ile Pro Arg Asn Ile Arg Pro
                85
                                    90
Asp Ser Leu Gln Leu His Gly Ser Thr Arg Cys Gly Cys Leu Leu Asp
Leu Ala Ala Phe His Pro Thr Leu Ile Pro Ser Pro Arg Gly Arg Val
                            120
Leu Pro Arg Asp Lys Cys Gly Ala His Arg His Ala Ala Trp Ser Leu
                        135
Ala Gln Ala Ala Cys Ala Asp Ser
145
                    150
<210> 2165
<211> 962
<212> DNA
<213> Homo sapiens
<400> 2165
nettteteat egacagegae geacaacegg egacateace ggtgaeggtt caaggtggea
geocgaggge cegeegtgaa ettattgtgt egtettatgg aagaaaagte aeteggaagt
acceptaaate accecagege eteatecece gaatetette gecatetet gtegeceetg
cgcttaaggc atcaccccac tagactgacc gaagtctcgc cgagggaggc tagggaggct
taggtggcca ggaatgacat cgggacgacg tctacgcgtc gaataggcag cggacgtacg
togagtaccg gccgtacggt ggtgtcttct gaccgcacac gcagagctat cgctaaaaga
ttgatggccc gcacctcagc tatgacgacg gccactctag aggaaatggg tcgtcgacac
teetggttee gtgatetgte ageegaagaa agategtgga tetegategt ggetegetea
ggtattgacg gcttcgtcca gtggtttgct gacgatgacg ccgagcccta ctcccccacc
gacgtcttcg acgtggcgcc ccggtccatg acccgcaaga tctccttgca ccagacagtc
600
gagetegtee geaccaegat tgaegtegtt gaggeacaaa ttgagaeega aatgeeaege
ggtgatcgcc aagtgctgcg cactgccatc gttcactact cccgcgaggt ggccttcgcc
geegeegagg tttacgegeg ageegeegaa egtegeggta eetgggatga aegtetggaa
tecetegteg ttgatgeegt egtgegagee gaegeegatg aacageteat etegegaget
totactoteg getggegeee gggeateaac etetgegteg ttgtegggeg ggeeeegaeg
accgagcatg aactccacgt gctgcgacgt gatggagaac gcatgcagat gacggtgcta
960
gc
962
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<211> 239

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<212> PRT
 <213> Homo sapiens
 <400> 2166
 Val Ala Arg Asn Asp Ile Gly Thr Thr Ser Thr Arg Arg Ile Gly Ser
 Gly Arg Thr Ser Ser Thr Gly Arg Thr Val Val Ser Ser Asp Arg Thr
                                 25
 Arg Arg Ala Ile Ala Lys Arg Leu Met Ala Arg Thr Ser Ala Met Thr
                             40
 Thr Ala Thr Leu Glu Glu Met Gly Arg Arg His Ser Trp Phe Arg Asp
                         55
 Leu Ser Ala Glu Glu Arg Ser Trp Ile Ser Ile Val Ala Arg Ser Gly
 Ile Asp Gly Phe Val Gln Trp Phe Ala Asp Asp Asp Ala Glu Pro Tyr
                 85
 Ser Pro Thr Asp Val Phe Asp Val Ala Pro Arg Ser Met Thr Arg Lys
                                 105
 Ile Ser Leu His Gln Thr Val Glu Leu Val Arg Thr Thr Ile Asp Val
                             120
 Val Glu Ala Gln Ile Glu Thr Glu Met Pro Arg Gly Asp Arg Gln Val
                                             140
                         135
 Leu Arg Thr Ala Ile Val His Tyr Ser Arg Glu Val Ala Phe Ala Ala
                                         155
                     150
 Ala Glu Val Tyr Ala Arg Ala Ala Glu Arg Arg Gly Thr Trp Asp Glu
                                      170
                 165
 Arg Leu Glu Ser Leu Val Val Asp Ala Val Val Arg Ala Asp Ala Asp
                                  185
 Glu Gln Leu Ile Ser Arg Ala Ser Thr Leu Gly Trp Arg Pro Gly Ile
                             200
 Asn Leu Cys Val Val Val Gly Arg Ala Pro Thr Thr Glu His Glu Leu
                         215
 His Val Leu Arg Arg Asp Gly Glu Arg Met Gln Met Thr Val Leu
 225
<210> 2167
 <211> 325
 <212> DNA
 <213> Homo sapiens
 <400> 2167
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 catccacatt atcccgactg gaagatctcg ccaggttacg gacagtggtc gcgtagcgaa
 cagatogaca gtgtgactgt gacgegagte agacaetteg teeegeggeg teeeaeggeg
 attettegag eggtgtetga ggtgaegtte gggttgegte tetgegeegt eegttggega
 ageaccgegg egattgtgge tgtgtegeeg geettgetet egaegeggte gegegggteg
 tgcgctgatc tcccacagca taccc
 325
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<210> 2168
<211> 108
<212> PRT
<213> Homo sapiens
<400> 2168
Thr Gly Ala Val Cys Glu Gly Leu Val Thr Pro Asp Arg Glu Val His
                                    10
Ala Val Thr Ala His Pro His Tyr Pro Asp Trp Lys Ile Ser Pro Gly
                                25
Tyr Gly Gln Trp Ser Arg Ser Glu Gln Ile Asp Ser Val Thr Val Thr
                            40
Arg Val Arg His Phe Val Pro Arg Arg Pro Thr Ala Ile Leu Arg Ala
Val Ser Glu Val Thr Phe Gly Leu Arg Leu Cys Ala Val Arg Trp Arg
                                         75
Ser Thr Ala Ala Ile Val Ala Val Ser Pro Ala Leu Leu Ser Thr Arg
                                    90
Ser Arg Gly Ser Cys Ala Asp Leu Pro Gln His Thr
            100
<210> 2169
<211> 309
<212> DNA
<213> Homo sapiens
<400> 2169
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atectggaga aggtegteaa ggeeggeaag eegetgeteg teategeega ggacategae
ggggaggccc tgtccaccct cgtcgtcaat aagatccgcg gtaccttcag ctcggtggca
180
gtcaaggcgc ccggcttcgg tgaccgccgc aaggcaatgc tgcaggacat cgccaccetc
accggtggtc aggtcgtcgc tcccgaggtt gggctcaagc tcgaccaggt gggcctcgag
300
gttcagggc
309
<210> 2170
<211> 103
<212> PRT
<213> Homo sapiens
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Glu Asp Ala Tyr Val Leu Ile Thr Gln Gly Lys Ile Ser Ala Ile Ala
Asp Val Leu Pro Ile Leu Glu Lys Val Val Lys Ala Gly Lys Pro Leu
                                25
Leu Val Ile Ala Glu Asp Ile Asp Gly Glu Ala Leu Ser Thr Leu Val
                            40
Val Asn Lys Ile Arg Gly Thr Phe Ser Ser Val Ala Val Lys Ala Pro
```

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55
    50
Gly Phe Gly Asp Arg Arg Lys Ala Met Leu Gln Asp Ile Ala Thr Leu
                    70
Thr Gly Gly Gln Val Val Ala Pro Glu Val Gly Leu Lys Leu Asp Gln
Val Gly Leu Glu Val Gln Gly
<210> 2171
<211> 518
<212> DNA
<213> Homo sapiens
<400> 2171
cgcgtaatgt gtattaaggt ccttggtggc tcgcatcgcc gttatgcagc aatcggtgat
atcatcaaaq tttcaqtqaa qgaaqcaatt cctcgcggaa aaattaaaaa aggtaatgtt
cattcagctg tggtagtgcg taccagaaaa ggtgtacgtc gtcccgatgg ttctgttatt
cgttttgatc gcaacgcagc ggttatcttg aatgcaaaca accagccagt cggtacacgt
atctttggcc ctgtaacccg tgagcttcga aatgaaaatt tcatgaagat tgtttcactg
gcgccagaag tactgtaagg aaccgaaaat ggcagcaaaa ataaaacgtg acgatgaagt
aattgttatt gccggtaaag ataaaggtaa aactgggaaa gtttctcaag ttttaactaa
cggtaaagta attattgaag gtgtaaatgt tcaaaagaaa caccaaaaac caaaccctca
agegggegtg gaaggeggaa teattgaaca gaatgeat
<210> 2172
<211> 105
<212> PRT
<213> Homo sapiens
<400> 2172
Arg Val Met Cys Ile Lys Val Leu Gly Gly Ser His Arg Arg Tyr Ala
Ala Ile Gly Asp Ile Ile Lys Val Ser Val Lys Glu Ala Ile Pro Arg
                                25
Gly Lys Ile Lys Lys Gly Asn Val His Ser Ala Val Val Arg Thr
Arg Lys Gly Val Arg Arg Pro Asp Gly Ser Val Ile Arg Phe Asp Arg
Asn Ala Ala Val Ile Leu Asn Ala Asn Asn Gln Pro Val Gly Thr Arg
                                        75
Ile Phe Gly Pro Val Thr Arg Glu Leu Arg Asn Glu Asn Phe Met Lys
                85
                                    90
Ile Val Ser Leu Ala Pro Glu Val Leu
            100
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<210> 2173
<211> 475
<212> DNA
<213> Homo sapiens
<400> 2173
nntggggaag aaatgccggt gcatgcactt tgtgcagcat taggtgcagg ggtgatgcag
egggegegtg cettttgegg eggggttteg ageatteate tggtgeatge attttegeat
geatttettg tateetegte atgegtttet ceccatgeae acacattate geetttgeae
ccgcagggac gcatggaata cctcgtgaaa tggaagggat ggtcgcagaa gtacagcaca
tgggaaccgg aggaaaacat cctggatgct cgcttgctcg cagcctttga ggaaagggaa
agagagatgg agetetatgg ceceaaaaag egtggaceca ageecaaaac etteeteete
aaagegeagg ccaaggeaaa ggeeaaaaet taegagttte gaagtgaete ageeagggge
atcoggatec cotaccotgg cogetegece caggacetgg cotecactte coggg
475
<210> 2174
<211> 158
<212> PRT
<213> Homo sapiens
<400> 2174
Xaa Gly Glu Glu Met Pro Val His Ala Leu Cys Ala Ala Leu Gly Ala
Gly Val Met Gln Arg Ala Arg Ala Phe Cys Gly Gly Val Ser Ser Ile
His Leu Val His Ala Phe Ser His Ala Phe Leu Val Ser Ser Cys
                            40
Val Ser Pro His Ala His Thr Leu Ser Pro Leu His Pro Gln Gly Arq
Met Glu Tyr Leu Val Lys Trp Lys Gly Trp Ser Gln Lys Tyr Ser Thr
                    70
                                        75
Trp Glu Pro Glu Glu Asn Ile Leu Asp Ala Arg Leu Leu Ala Ala Phe
                85
                                    90
Glu Glu Arg Glu Arg Glu Met Glu Leu Tyr Gly Pro Lys Lys Arg Gly
                                105
Pro Lys Pro Lys Thr Phe Leu Leu Lys Ala Gln Ala Lys Ala Lys Ala
                            120
Lys Thr Tyr Glu Phe Arg Ser Asp Ser Ala Arg Gly Ile Arg Ile Pro
                        135
Tyr Pro Gly Arg Ser Pro Gln Asp Leu Ala Ser Thr Ser Arg
145
                    150
<210> 2175
<211> 462
<212> DNA
<213> Homo sapiens
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<400> 2175
egegacacce tetttggtgg gegeetteet teteegaatt egegaaccet ceagactetg
gcccaggagg ttgtcgagcg tggagccgat atcggcattg ccactgatgg tgacgcagac
cgcctcggta tcattgatga ccaggggcat ttcttgcatc ccaaccagat cctcgtattg
ctgtacacct accttctgga ggacaaggga tggcaggtgc cctgcgtgcg taacctcgcg
acgacccacc tgcttgaccg tgtcgccgag gcccacgggc agacctgtta cgaggtaccg
gtcggattta agtgggtgtc gtccaagatg gccgagacca acgccgtcat cggtggtgag
tcctccggtg gtttgaccgt ccaggggcat attgcaggca aggatggtgt ctatgctggc
accetgetgg tggaaatgat cgccaagegg ggtaagaage tt
462
<210> 2176
<211> 154
<212> PRT
<213> Homo sapiens
<400> 2176
Arg Asp Thr Leu Phe Gly Gly Arg Leu Pro Ser Pro Asn Ser Arg Thr
Leu Gln Thr Leu Ala Gln Glu Val Val Glu Arg Gly Ala Asp Ile Gly
                                25
Ile Ala Thr Asp Gly Asp Ala Asp Arg Leu Gly Ile Ile Asp Asp Gln
                            40
Gly His Phe Leu His Pro Asn Gln Ile Leu Val Leu Leu Tyr Thr Tyr
                        55
Leu Leu Glu Asp Lys Gly Trp Gln Val Pro Cys Val Arg Asn Leu Ala
Thr Thr His Leu Leu Asp Arg Val Ala Glu Ala His Gly Gln Thr Cys
Tyr Glu Val Pro Val Gly Phe Lys Trp Val Ser Ser Lys Met Ala Glu
                                105
Thr Asn Ala Val Ile Gly Gly Glu Ser Ser Gly Gly Leu Thr Val Gln
                            120
Gly His Ile Ala Gly Lys Asp Gly Val Tyr Ala Gly Thr Leu Leu Val
                        135
Glu Met Ile Ala Lys Arg Gly Lys Lys Leu
145
                    150
<210> 2177
<211> 478
<212> DNA
<213> Homo sapiens
<400> 2177
ctcgagaatc atgacggcga cgacgtgact atctccaccc gtgtgcctcg tgacggcggg
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accttggact cgattgtcgg cgtgctggcc ggggcatcct ggtatcagcg ggagatccac

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gacttttttg gtgtgaggtt tgtcggccct ggggcagatg atcgtgccct ccttgtccac
gatgcaccga aaccgcccct gcgcaaggaa gctgtgttgg cgcagcgagc tgacaccgtg
tggccgggtg cggctgacca ggctggctcg aagtccgcga gtcgacgtct gccggtcggc
gttectgace etgagacgtg geggegtate aaagacggeg aggatattee ggatgeegag
gteategegg ceatgtetgg ceggegeeg egateagetg ceegtegaat ggeaageaeg
gegteaggea ggeaggeatg agacattega etateaacet tgaegtegae gegtgeae
<210> 2178
<211> 146
<212> PRT
<213> Homo sapiens
<400> 2178
Leu Glu Asn His Asp Gly Asp Asp Val Thr Ile Ser Thr Arg Val Pro
Arg Asp Gly Gly Thr Leu Asp Ser Ile Val Gly Val Leu Ala Gly Ala
Ser Trp Tyr Gln Arg Glu Ile His Asp Phe Phe Gly Val Arg Phe Val
Gly Pro Gly Ala Asp Asp Arg Ala Leu Leu Val His Asp Ala Pro Lys
                        55
Pro Pro Leu Arg Lys Glu Ala Val Leu Ala Gln Arg Ala Asp Thr Val
                    70
Trp Pro Gly Ala Ala Asp Gln Ala Gly Ser Lys Ser Ala Ser Arg Arg
                85
                                    90
Leu Pro Val Gly Val Pro Asp Pro Glu Thr Trp Arg Arg Ile Lys Asp
            100
                                105
Gly Glu Asp Ile Pro Asp Ala Glu Val Ile Ala Ala Met Ser Gly Arg
Arg Pro Arg Ser Ala Ala Arg Arg Met Ala Ser Thr Ala Ser Gly Arg
Gln Ala
145
<210> 2179
<211> 296
<212> DNA
<213> Homo sapiens
<400> 2179
gtgcacttcc gagtggacgt cgagcgtcgc attaacgggg ccggcgcggt gggcgcacac
aagacgtega tgetgeagga tetggaenge gaeegegga tggagatega eeegetegte
tecgtegtte aggagatggg acgeetggee aacgtgeega egeecacget egatgtegtg
180
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ctcccactga tcaagcaacg tgaattcatg acgaagccgg atgccgtggc ggccgcgcag
gaacgtctgg ctaaagcggc ataaaccagc cgccgaaacc agcggcataa cgcggn
296
<210> 2180
<211> 87
<212> PRT
<213> Homo sapiens
<400> 2180
Val His Phe Arg Val Asp Val Glu Arg Arg Ile Asn Gly Ala Gly Ala
Val Gly Ala His Lys Thr Ser Met Leu Gln Asp Leu Asp Xaa Asp Arg
Ala Met Glu Ile Asp Pro Leu Val Ser Val Val Gln Glu Met Gly Arg
Leu Ala Asn Val Pro Thr Pro Thr Leu Asp Val Val Leu Pro Leu Ile
Lys Gln Arg Glu Phe Met Thr Lys Pro Asp Ala Val Ala Ala Gln
                                        75
Glu Arg Leu Ala Lys Ala Ala
                85
<210> 2181
<211> 387
<212> DNA
<213> Homo sapiens
<400> 2181.
ngcgcgccgg gatggatcat agtctggctc gatgcatcac gtgcgcgcat gcgcgcgctg
togattocog acggcatgat cgcggcacto gaccgtaccg gcaaggcgca aacgcaccto
acgetggeat egeeggaage gggtgtegte agegaaetga aegtgegega eggtgegatg
gtcgcgccgg ggcagacgct cgcgaagatt tcgggcctct cgaagctctg gctgatcgtc
240
gagattccgg aagcgctcgc gctcgatgcg cgtccgggca tgaccgtcga cgcgacgttc
tegggegate egacgeagea ttteaceggg egtateegeg agateetgee gggeateace
accagtagec geacgettea ggegege
387
<210> 2182
<211> 129
<212> PRT
<213> Homo sapiens
<400> 2182
Xaa Ala Pro Gly Trp Ile Ile Val Trp Leu Asp Ala Ser Arg Ala Arg
                 5
Met Arg Ala Leu Ser Ile Pro Asp Gly Met Ile Ala Ala Leu Asp Arg
```

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20
Thr Gly Lys Ala Gln Thr His Leu Thr Leu Ala Ser Pro Glu Ala Gly
                            40
Val Val Ser Glu Leu Asn Val Arg Asp Gly Ala Met Val Ala Pro Gly
Gln Thr Leu Ala Lys Ile Ser Gly Leu Ser Lys Leu Trp Leu Ile Val
Glu Ile Pro Glu Ala Leu Ala Leu Asp Ala Arg Pro Gly Met Thr Val
                                    90
Asp Ala Thr Phe Ser Gly Asp Pro Thr Gln His Phe Thr Gly Arg Ile
                                105
Arg Glu Ile Leu Pro Gly Ile Thr Thr Ser Ser Arg Thr Leu Gln Ala
        115
                            120
                                                125
Arg
<210> 2183
<211> 310
<212> DNA
<213> Homo sapiens
<400> 2183
aagettgaaa aacaaatttg tgeacagtet gataacecaa aaatgaetga tggattgget
ctgcattttc caagcaggga ggggtcgggc atggagaatg aaacattctg agaaaagact
taaatgtgga aacttttggt tcaagagggt attctaggag atacaagaaa tatctcctgg
gggcatccaa agggaataac actgtaatct tgagtgatgt atggttccat tgcccgagga
atagggatga aaaccataaa ctcctttggg tgggtattaa cttatcantc aaagttacca
tanataatgg
310
<210> 2184
<211> 100
<212> PRT
<213> Homo sapiens
<400> 2184
Met Val Thr Leu Xaa Asp Lys Leu Ile Pro Thr Gln Arg Ser Leu Trp
Phe Ser Ser Leu Phe Leu Gly Gln Trp Asn His Thr Ser Leu Lys Ile
Thr Val Leu Phe Pro Leu Asp Ala Pro Arg Arg Tyr Phe Leu Tyr Leu
Leu Glu Tyr Pro Leu Glu Pro Lys Val Ser Thr Phe Lys Ser Phe Leu
Arg Met Phe His Ser Pro Cys Pro Thr Pro Pro Cys Leu Glu Asn Ala
                                        75
Glu Pro Ile His Gln Ser Phe Leu Gly Tyr Gln Thr Val His Lys Phe
                                    90
Val Phe Gln Ala
```

100

<210> 2185 <211> 723 <212> DNA <213> Homo sapiens <400> 2185 ngaatateca tgcagcaget cgtcgacaat tttgacggtg ccatecetga cgatettgac tetettgtga ceetgeeegg agteggtegt aagacegeea atgttgtttt aggtaatgee ttoggcatoc coggaatoac cooggacaco caegteatge gggtateteg aegtetggge tggaccgatg cgactacccc cgccaaggtg gaaaccgacc tggctgagct ttttgacccg tetqaatqqq tgatqttqtg teacegeete atetggeaeg ggeggeggeg etgteaeteg cggcgtcctg cctgcggggt atgcccggtt gccgagtggt gcccgtcctt cggggaaggc ccaacggatc ccgaggaggc cgccacgtta gtccgggagc cgcgtcgatg agggggatga acgttttcgg cgcggtgatg gccgccttga tgtttgctgg ctgcggggga gatgcgggca tageteatea gegtgaaaat geeggaatae eggggtgete geatttgeeg teggggeega ttgcgaaaag ttccgggccg gccacagagg gccggcccat gcccgatcac ggcttgcaat gccttggtga ggggccgacg atctccatgt ctcgggcgac atcgaggggc gtgaccgtcg tgacgatctg ggcgtcgtgg tgtcgaccat gtcgtagtga ggctccgctc attgcgaacg 720 cqt 723 <210> 2186 <211> 136 <212> PRT <213> Homo sapiens <400> 2186 Xaa Ile Ser Met Gln Gln Leu Val Asp Asn Phe Asp Gly Ala Ile Pro Asp Asp Leu Asp Ser Leu Val Thr Leu Pro Gly Val Gly Arg Lys Thr 25 Ala Asn Val Val Leu Gly Asn Ala Phe Gly Ile Pro Gly Ile Thr Pro Asp Thr His Val Met Arg Val Ser Arg Arg Leu Gly Trp Thr Asp Ala Thr Thr Pro Ala Lys Val Glu Thr Asp Leu Ala Glu Leu Phe Asp Pro Ser Glu Trp Val Met Leu Cys His Arg Leu Ile Trp His Gly Arg Arg Arg Cys His Ser Arg Arg Pro Ala Cys Gly Val Cys Pro Val Ala Glu

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110
            100
                                105
Trp Cys Pro Ser Phe Gly Glu Gly Pro Thr Asp Pro Glu Glu Ala Ala
                            120
Thr Leu Val Arg Glu Pro Arg Arg
    130
                        135
<210> 2187
<211> 342
<212> DNA
<213> Homo sapiens
<400> 2187
nnacgcgtga aggatgcgcc ccggtcgacc ggccatccgt cttgcctcgc aggcatccag
cccgccatat gctgcaaccg caacaccgct ttgccgtcgc atggcatctc cactccggat
cgcatcgatc cacgagggct atcggcgcga aagaagttgc cggggcaaaa tcccggcgag
gaaagcccga tggagtggaa gacgctgctc aacgacaccc gcttcggagg ggtcgccagc
ctcgatggga cgcgcggacg gtcggagttc cagaaggacc acgaccggat catcttctcc
qaaqccttcc gcaagctggg ccgcaagacc caggtgcacc cg
342
<210> 2188
<211> 51
<212> PRT
<213> Homo sapiens
<400> 2188
Met Glu Trp Lys Thr Leu Leu Asn Asp Thr Arg Phe Gly Gly Val Ala
                                     10
Ser Leu Asp Gly Thr Arg Gly Arg Ser Glu Phe Gln Lys Asp His Asp
                                25
Arg Ile Ile Phe Ser Glu Ala Phe Arg Lys Leu Gly Arg Lys Thr Gln
        35
Val His Pro
    50
<210> 2189
<211> 1412
<212> DNA
<213> Homo sapiens
<400> 2189
ntcgcttcat ggtgcgcaat tacgacaacg ccaagtctca gaatgccgag gcttacaccg
cgttcttcca cgcgatgcta gatgccgggg tcaacctgcc gccatcgtgc tttgaggcct
ggttcctctc ggacgctcac gacgacgaag ctttcgaggt tttccgcgcc gccctgccga
180
gggctgccca ggcggctgcc caggtgatca gtgcctgaca ccgggctgac ttcgcaggtc
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240

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atcgaggcaa tctgtgcctg gttcgacgcc aacggacgcg atctgccgtg gcgccgaccc
ggcacctccg cgtggggcgt gcttgttagc gaggtcatga gccaacagac cccgatgtcc
cgggtgatcg ggccgtggca cgagtggatg aaccgctggc ccacccctga tgatttggcg
gaggaggact ctggggaagc ggttgccgcg tgggggcgcc tgggttaccc gcgtcgggcc
480
ttacgcctgc attcctgtgc cgtcacgatc gccaccgagc acgacggggg tgtgcccaac
agtgacgacg agctcgtcgc cctcccgggt attggcgact acaccgcgag cgcagtcgtc
tettttgegt ttggeggeeg egecacagtg ettgacacca atgtacgteg eetcateget
agagcagagt ctgggatcgc aaactgtcca acctcggtga cgagggctga gcgggtagtc
gccgacgcgt tggttcccga cgaagacgtc cgagcggcca agtgggcggt ggcgtcgatg
gaattggggg cactggtatg cacggcgcgg tetecgcagt gtgaggtetg eccgatecgg
gatggctgca ggtgggtgat cgacggtagg ccggacaatg ccccggcccg tcgaggacag
ccatggaagg gcacggatcg ccagtgccgc ggcgtgatta tggacgtggt gcgcaacagc
cctcacgggg tgaaggtcca gatggctctt tccgcctggc ccgagctcga tcaggcatca
aggtgcctgg aatccttact cgatgacggt ttagtgcacc gacgaggtaa ccttattagc
ctgtgacctg agaaattctt ggccccgacc acccaaacag accgagtcca gcagtgatgc
cgctgggtta tccttagagg cggtcctcaa attggatcag ccaaaccacg tcaccgatca
agacaccatg agcacaacac ccaaacagcc gcgcacggcg acagctgccc gacgccgaca
cattgtcgac catctgcgtt ctttggggca ctcggagtcc atcggagatc tttaccaact
gttcggtgtc tctacatcga cgattcgccg cgatgtcgat gccctctcgg atgaatccaa
gatctggaag atttccgggg gagacgtcat ga
1412
<210> 2190
<211> 292
<212> PRT
<213> Homo sapiens
<400> 2190
Ser Val Pro Asp Thr Gly Leu Thr Ser Gln Val Ile Glu Ala Ile Cys
Ala Trp Phe Asp Ala Asn Gly Arg Asp Leu Pro Trp Arg Arg Pro Gly
Thr Ser Ala Trp Gly Val Leu Val Ser Glu Val Met Ser Gln Gln Thr
Pro Met Ser Arg Val Ile Gly Pro Trp His Glu Trp Met Asn Arg Trp
```

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50
Pro Thr Pro Asp Asp Leu Ala Glu Glu Asp Ser Gly Glu Ala Val Ala
                                        75
Ala Trp Gly Arg Leu Gly Tyr Pro Arg Arg Ala Leu Arg Leu His Ser
Cys Ala Val Thr Ile Ala Thr Glu His Asp Gly Gly Val Pro Asn Ser
                                                     110
                                105
Asp Asp Glu Leu Val Ala Leu Pro Gly Ile Gly Asp Tyr Thr Ala Ser
                                                125
                            120
Ala Val Val Ser Phe Ala Phe Gly Gly Arg Ala Thr Val Leu Asp Thr
                        135
Asn Val Arg Arg Leu Ile Ala Arg Ala Glu Ser Gly Ile Ala Asn Cys
                    150
                                        155
Pro Thr Ser Val Thr Arg Ala Glu Arg Val Val Ala Asp Ala Leu Val
                                    170
                165
Pro Asp Glu Asp Val Arg Ala Ala Lys Trp Ala Val Ala Ser Met Glu
                                185
Leu Gly Ala Leu Val Cys Thr Ala Arg Ser Pro Gln Cys Glu Val Cys
Pro Ile Arg Asp Gly Cys Arg Trp Val Ile Asp Gly Arg Pro Asp Asn
                        215
Ala Pro Ala Arg Arg Gly Gln Pro Trp Lys Gly Thr Asp Arg Gln Cys
                                        235
                    230
Arg Gly Val Ile Met Asp Val Val Arg Asn Ser Pro His Gly Val Lys
                245
Val Gln Met Ala Leu Ser Ala Trp Pro Glu Leu Asp Gln Ala Ser Arg
                                                     270
                                265
Cys Leu Glu Ser Leu Leu Asp Asp Gly Leu Val His Arg Arg Gly Asn
                            280
Leu Ile Ser Leu
    290
<210> 2191
<211> 502
<212> DNA
<213> Homo sapiens
<400> 2191
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gactcccttg acgacgacac catttccggg ggtagcccac attggtgctg cctcatggac
tacattgaat cccgttcaat cctgaacggc gttcaggacg tctccagtct cggaaggacc
agagtattgc tgaatctagc cgacatgacc gaacgcggcc tgagggggga gtccattacc
cgcgaggagg ccctcgagat tcttcgcagc agtgatgatg agctcatgtc aatcatcgcc
geogeoggaa aagtgegteg ceaettttte gataaceggg ttegeeteaa etacetggte
aacctcaagt ccggcctgtg tcccgaagac tgctcctatt gctcgcagcg tctgggatcg
cgtgccgaga tcacgaaata ctcctgggcc gatccgcaga aggtacacga cgccgtcgag
```

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gctgggattg ccggtggtgc ac
502
<210> 2192
<211> 104
<212> PRT
<213> Homo sapiens
<400> 2192
Leu Asn Leu Ala Asp Met Thr Glu Arg Gly Leu Arg Gly Glu Ser Ile
Thr Arg Glu Glu Ala Leu Glu Ile Leu Arg Ser Ser Asp Asp Glu Leu
                                25
Met Ser Ile Ile Ala Ala Ala Gly Lys Val Arg Arg His Phe Phe Asp
                            40
Asn Arg Val Arg Leu Asn Tyr Leu Val Asn Leu Lys Ser Gly Leu Cys
Pro Glu Asp Cys Ser Tyr Cys Ser Gln Arg Leu Gly Ser Arg Ala Glu
Ile Thr Lys Tyr Ser Trp Ala Asp Pro Gln Lys Val His Asp Ala Val
                                    90
Glu Ala Gly Ile Ala Gly Gly Ala
            100
<210> 2193
<211> 321
<212> DNA
<213> Homo sapiens
<400> 2193
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aacatactcc tcttgccaac tgggtattac tggaccttac tgggccttac tggacccaac
atactcctct tgccaactgg ggatttaaaa attttaaaag cccctttatc tccctccaca
agtcatgtac tgccaacagg gacacactgt tttctttgga aaccctgctg tgtgcccaga
cagaggteec actgeectgg gacageteec ttgeetanag gggaaggagg gtgtgtgtge
tgtgtgtt taggttgggg a
321
<210> 2194
<211> 106
<212> PRT
<213> Homo sapiens
<400> 2194
Met Gly Asn Ala Glu His Gly Gln Ser His Arg Leu Ser Ser Leu Ala
                                     10
Phe Trp Thr Gln His Thr Pro Leu Ala Asn Trp Val Leu Leu Asp Leu
                                 25
Thr Gly Pro Tyr Trp Thr Gln His Thr Pro Lèu Ala Asn Trp Gly Phe
```

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45
        35
                            40
Lys Asn Phe Lys Ser Pro Phe Ile Ser Leu His Lys Ser Cys Thr Ala
                        55
Asn Arg Asp Thr Leu Phe Ser Leu Glu Thr Leu Leu Cys Ala Gln Thr
                    70
Glu Val Pro Leu Pro Trp Asp Ser Ser Leu Ala Xaa Arg Gly Arg Arg
                85
Val Cys Val Leu Cys Val Phe Arg Leu Gly
            100
<210> 2195
<211> 504
<212> DNA
<213> Homo sapiens
<400> 2195
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gacggtgtgg cacaccccaa ctttggcaat atcgtccacg acctggtgct gttgcacagc
ctgggtgtgc gtctggtact ggtccacggt tcgcgcccgc agatcgacag ccgccttgag
gcacgaggcc tggtgccgta ttaccacaag ggcatgcgtg tcaccgatgc atcaacgctc
gaatgcgtga tcgatgctgt cgggcaactg cgcattgcga ttgaagcgcg cttgtcgatg
gacatggcgt cttcgccaat gcagggttcg cgtctgcgcg tagccagcgg caacctggtc
actgegege egateggegt getegaeggt gtggatttte accatacegg egaagtgege
eggqtggace geaagggeat caacegeetg etegatgage getegattgt getgetgteg
cccttgggtt actcgcccac cggt
504
<210> 2196
<211> 168
<212> PRT
<213> Homo sapiens
<400> 2196
Xaa Ala Ser Pro Tyr Ile Asn Ala His Arg Asp Cys Thr Phe Val Val
                                    10
Met Leu Pro Gly Asp Gly Val Ala His Pro Asn Phe Gly Asn Ile Val
                                25
His Asp Leu Val Leu Leu His Ser Leu Gly Val Arg Leu Val Leu Val
His Gly Ser Arg Pro Gln Ile Asp Ser Arg Leu Glu Ala Arg Gly Leu
Val Pro Tyr Tyr His Lys Gly Met Arg Val Thr Asp Ala Ser Thr Leu
Glu Cys Val Ile Asp Ala Val Gly Gln Leu Arg Ile Ala Ile Glu Ala
                                    90
Arg Leu Ser Met Asp Met Ala Ser Ser Pro Mèt Gln Gly Ser Arg Leu
```

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105
            100
Arg Val Ala Ser Gly Asn Leu Val Thr Ala Arg Pro Ile Gly Val Leu
                            120
Asp Gly Val Asp Phe His His Thr Gly Glu Val Arg Arg Val Asp Arg
                        135
   130
Lys Gly Ile Asn Arg Leu Leu Asp Glu Arg Ser Ile Val Leu Leu Ser
                                        155
                    150
Pro Leu Gly Tyr Ser Pro Thr Gly
                165
<210> 2197
<211> 351
<212> DNA
<213> Homo sapiens
<400> 2197
acaagtccgt cgacgattcg ctttccggag gcgggcccag gaatggtaat gaaacccgag
ttatggggcc ctgcgctcga cgagattgcc gcgggaaaac gtgccggagg ggctgaacag
ttagattccg cagtgcagca catccacggt gctactcacg ataaactgtc cggtgctgtt
ccgaaacgct acgatggtcg ggatgtcttg gcaggcgagg acccgaatgc accgttgctg
cttgtgccta gcccggctgg tgcagtgttt agtcaaaata aggcacaagc ctggtccaat
gaagaccaca ttgtftttgc ctgtgggcgc tatgaaggta ttgatcaacg c
351
<210> 2198
<211> 117
<212> PRT
<213> Homo sapiens
<400> 2198
Thr Ser Pro Ser Thr Ile Arg Phe Pro Glu Ala Gly Pro Gly Met Val
Met Lys Pro Glu Leu Trp Gly Pro Ala Leu Asp Glu Ile Ala Ala Gly
Lys Arg Ala Gly Gly Ala Glu Gln Leu Asp Ser Ala Val Gln His Ile
His Gly Ala Thr His Asp Lys Leu Ser Gly Ala Val Pro Lys Arg Tyr
Asp Gly Arg Asp Val Leu Ala Gly Glu Asp Pro Asn Ala Pro Leu Leu
                                         75
Leu Val Pro Ser Pro Ala Gly Ala Val Phe Ser Gln Asn Lys Ala Gln
                                     90
Ala Trp Ser Asn Glu Asp His Ile Val Phe Ala Cys Gly Arg Tyr Glu
            100
                                105
Gly Ile Asp Gln Arg
        115
<210> 2199
<211> 457
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<212> DNA
<213> Homo sapiens
<400> 2199
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ggagcccggg agaagggctg gaaggagggg actggacgtg cggagaattc ccccctaaaa
120
ggcagaagcc cccgccccca ccctccgagc tccgttcggg cagagcgcct gcctgcctgc
cgttgctggg ggcgcccacc tcgcccagcc atgccaggcc cggccaccga cgcggggaag
atccctttct gcgacgccaa ggaagaaatc cgtgccgggc tcgaaagctc tgagggcggc
ggcggcccgg agaggccagg cgcgcgggg cagcggcaga acatcgtctg gaggaatgtc
gtcctgatga gcttgctcca cttgggggcc gtgtactccc tggtgctcat ccccaaagcc
aagccactca ctctgctctg gggtaagtcc cgccggc
457
<210> 2200
<211> 152
<212> PRT
<213> Homo sapiens
<400> 2200
Arg Arg Arg Pro Pro Arg Ser Ala Ser Leu Gly His Ala Lys Thr Leu
Gly Lys Ser Ala Gly Ala Arg Glu Lys Gly Trp Lys Glu Gly Thr Gly
Arg Ala Glu Asn Ser Pro Leu Lys Gly Arg Ser Pro Arg Pro His Pro
Pro Ser Ser Val Arg Ala Glu Arg Leu Pro Ala Cys Arg Cys Trp Gly
Arg Pro Pro Arg Pro Ala Met Pro Gly Pro Ala Thr Asp Ala Gly Lys
                                         75
                    70
Ile Pro Phe Cys Asp Ala Lys Glu Glu Ile Arg Ala Gly Leu Glu Ser
Ser Glu Gly Gly Gly Pro Glu Arg Pro Gly Ala Arg Gly Gln Arg
                                 105
            100
Gln Asn Ile Val Trp Arg Asn Val Val Leu Met Ser Leu Leu His Leu
                             120
                                                 125
Gly Ala Val Tyr Ser Leu Val Leu Ile Pro Lys Ala Lys Pro Leu Thr
                                             140
                        135
Leu Leu Trp Gly Lys Ser Arg Arg
                    150
145
<210> 2201
<211> 336
<212> DNA
<213> Homo sapiens
<400> 2201
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agtactgcga tggacageta tgtcgtggat ggtggtcgca aattacatgt ttgtggtaac
aaccctgatt gcgatggtta tgaagtcgaa gaaggcgaat tcaagatcaa gggttatgat
ggtccgacta tcccatgcga taaatgtgat ggtgagatgc agcttaaaac gggtcgtttt
ggtccatatt tcgcatgtac tagctgtgac aatactcgta aggtactcaa gagtggtcaa
cctgctccgc cacgtgtaga cccaatcaaa atggagcatc tacgttcaac gaagcatgat
gatttcttcg tcttacgtga gggcgctgct ggttta
336
<210> 2202
<211> 112
<212> PRT
<213> Homo sapiens
<400> 2202
Ser Thr Ala Met Asp Ser Tyr Val Val Asp Gly Gly Arg Lys Leu His
Val Cys Gly Asn Asn Pro Asp Cys Asp Gly Tyr Glu Val Glu Glu Gly
Glu Phe Lys Ile Lys Gly Tyr Asp Gly Pro Thr Ile Pro Cys Asp Lys
                            40
Cys Asp Gly Glu Met Gln Leu Lys Thr Gly Arg Phe Gly Pro Tyr Phe
Ala Cys Thr Ser Cys Asp Asn Thr Arg Lys Val Leu Lys Ser Gly Gln
                                         75
Pro Ala Pro Pro Arg Val Asp Pro Ile Lys Met Glu His Leu Arg Ser
                                     90
Thr Lys His Asp Asp Phe Phe Val Leu Arg Glu Gly Ala Ala Gly Leu
                                 105
            100
<210> 2203
<211> 273
<212> DNA
<213> Homo sapiens
<400> 2203
ctcgagagat gcagtcccag ccggggtggg aagctgtgca gacagccccg gatctgggac
gtgatggaaa actcaacaga ctggttcaga tcttggcccg gagcccagag gcaccgggga
ccccagggc tgtttctccc tggccacacc agtaccccac ttccaaatgc cctgtaggtg
accaccagge cacacaggee egtetgaggg gecacagget gtgcaccatg ggacgcagge
ctgtccctgc ctccctccga tgtcctgatg gtg
<210> 2204
<211> 88
<212> PRT
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## <213> Homo sapiens

<400> 2204 Met Gln Ser Gln Pro Gly Trp Glu Ala Val Gln Thr Ala Pro Asp Leu Gly Arg Asp Gly Lys Leu Asn Arg Leu Val Gln Ile Leu Ala Arg Ser Pro Glu Ala Pro Gly Thr Pro Arg Ala Val Ser Pro Trp Pro His Gln Tyr Pro Thr Ser Lys Cys Pro Val Gly Asp His Gln Ala Thr Gln Ala 55 Arg Leu Arg Gly His Arg Leu Cys Thr Met Gly Arg Arg Pro Val Pro 75 Ala Ser Leu Arg Cys Pro Asp Gly 85 <210> 2205

<211> 387

<212> DNA

<213> Homo sapiens

## <400> 2205

gnnnnnggng nnnnactggt gtgcatggtt aaaatcctgc aagctactgg gttgccacag

catctgtccc actttgtgtt ctgcaaatac agcttctggg atcaacagga gccggtgatt

qtcqctcctq aagtggacac ctcctcctct tccgtcagca aggagccgca ctgcatggtt

gtctttgatc attgcaatga gttttctgtt aacatcaccg aagactttat cgagcatctt

tccgaaggag cattggcaat tgaagtatat ggacataaaa taaacgatcc ccggaaaaac

cccgccctgt gggatttggg aatcatccaa gcaaagacac gtagtcttcg ggacagatgg

agtgaagtgc ccaggaaatt ggaattc 387

<210> 2206

<211> 129

<212> PRT

<213> Homo sapiens

## <400> 2206

Xaa Xaa Gly Xaa Xaa Leu Val Cys Met Val Lys Ile Leu Gln Ala Thr Gly Leu Pro Gln His Leu Ser His Phe Val Phe Cys Lys Tyr Ser Phe 25

Trp Asp Gln Gln Glu Pro Val Ile Val Ala Pro Glu Val Asp Thr Ser

Ser Ser Ser Val Ser Lys Glu Pro His Cys Met Val Val Phe Asp His 60 55

Cys Asn Glu Phe Ser Val Asn Ile Thr Glu Asp Phe Ile Glu His Leu 70 Ser Glu Gly Ala Leu Ala Ile Glu Val Tyr Gly His Lys Ile Asn Asp

```
90
                85
Pro Arg Lys Asn Pro Ala Leu Trp Asp Leu Gly Ile Ile Gln Ala Lys
                                105
Thr Arg Ser Leu Arg Asp Arg Trp Ser Glu Val Pro Arg Lys Leu Glu
                            120
        115
Phe
<210> 2207
<211> 667
<212> DNA
<213> Homo sapiens
<400> 2207
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cgcgagctct ccagcctgca ctcactgctc tgggaggccg tcagccagct ggagcagagc
atagtateca aactgggace cetgeetegg atectgaggg aegtecacae ageaetgage
accccaggta gcgggcagct cccagggacc aatgacctgg cctccacacc gggctctggc
agcagcagca totcagotgg gotgcagaag atggtgattg agaacgatot ttocggtotg
atagatttca cccggttacc gtctccaacc cccgaaaaca aggacttgtt ttttgtcaca
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cctgatcttc agatggccaa cggtggcaag agcctctcca tggtggacct ccaggacgcc
cgcacgctgg atggggaggc aggctccccg gcgggccccg acgtcctccc cacagatggg
caggccgctg cagctcagct ggtggccggg tggccggccc gggcaacccc agtgaacctg
gcagggctgg ccacggtgcg gcgggcaggc cagacaccaa ccacaccagg cacctccgag
ggcgcgc
667
<210> 2208
<211> 222
<212> PRT
<213> Homo sapiens
<400> 2208
Ile Ser Asn Pro Glu Thr Leu Ser Asn Thr Ala Gly Phe Glu Gly Tyr
                                    10
Ile Asp Leu Gly Arg Glu Leu Ser Ser Leu His Ser Leu Leu Trp Glu
Ala Val Ser Gln Leu Glu Gln Ser Ile Val Ser Lys Leu Gly Pro Leu
                            40
Pro Arg Ile Leu Arg Asp Val His Thr Ala Leu Ser Thr Pro Gly Ser
                        55
Gly Gln Leu Pro Gly Thr Asn Asp Leu Ala Ser Thr Pro Gly Ser Gly
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75
65
                    70
Ser Ser Ser Ile Ser Ala Gly Leu Gln Lys Met Val Ile Glu Asn Asp
Leu Ser Gly Leu Ile Asp Phe Thr Arg Leu Pro Ser Pro Thr Pro Glu
                                105
           100
Asn Lys Asp Leu Phe Phe Val Thr Arg Ser Ser Gly Val Gln Pro Ser
                            120
Pro Ala Arg Ser Ser Ser Tyr Ser Glu Ala Asn Glu Pro Asp Leu Gln
                        135
Met Ala Asn Gly Gly Lys Ser Leu Ser Met Val Asp Leu Gln Asp Ala
                                        155
                    150
Arg Thr Leu Asp Gly Glu Ala Gly Ser Pro Ala Gly Pro Asp Val Leu
                165
                                    170
Pro Thr Asp Gly Gln Ala Ala Ala Gln Leu Val Ala Gly Trp Pro
                                                    190
                                185
Ala Arg Ala Thr Pro Val Asn Leu Ala Gly Leu Ala Thr Val Arg Arg
                            200
Ala Gly Gln Thr Pro Thr Thr Pro Gly Thr Ser Glu Gly Ala
                        215
<210> 2209
<211> 353
<212> DNA
<213> Homo sapiens
<400> 2209
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agagaaggcc atgagagaga tagcactggg acagatggtg tcagcagagg ggactccaga
ccacaqcaqa agtgaccaag ctgtagcttc cttagatggc cccaagggtg ggaggcttca
cacagcagag cctgggtctg gaggcacctt ggggatgttt ttccccatta ggcccctgag
ctctatggaa gcacttaact gcctgttccc cgcttattct gtgtttaaac caaggaaaca
acatgcctgg ggtctgaaat cctggattca aatcctgact gtgttgtgtg ctt
353
<210> 2210
<211> 94
<212> PRT
<213> Homo sapiens
<400> 2210
Met Arg Glu Ile Ala Leu Gly Gln Met Val Ser Ala Glu Gly Thr Pro
Asp His Ser Arg Ser Asp Gln Ala Val Ala Ser Leu Asp Gly Pro Lys
Gly Gly Arg Leu His Thr Ala Glu Pro Gly Ser Gly Gly Thr Leu Gly
Met Phe Phe Pro Ile Arg Pro Leu Ser Ser Met Glu Ala Leu Asn Cys
                        55
Leu Phe Pro Ala Tyr Ser Val Phe Lys Pro Arg Lys Gln His Ala Trp
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80
                                        75
65
                    70
Gly Leu Lys Ser Trp Ile Gln Ile Leu Thr Val Leu Cys Ala
                85
<210> 2211
<211> 493
<212> DNA
<213> Homo sapiens
<400> 2211
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cactgtaccc tgggactgca cagagggaaa cgattaccaa acccagagac ggggaccgga
aggaaggagg ggaaggggat ggatccatgt actttggggt tggagaaatg ggggacagca
agtotoctca acccaaarac agccccctg ggaggetect gccccgtoto tgtggatagt
gagcccagct gcaagggcgg cctgccaggg acaaacccac caaaaggaaa gatgttgtag
aaccaaagag aggctccctg aaagaggcgt ctcccggggc ctccaagccc gggagcgccc
ggcggacagg gggcagtggc caagtctgtg cggaccctga ccgcctcaga gaacgagagc
atgcgcaaag tcatgcccat caccaagtcc agcagaggcg ccggctggag gcgaccagag
ctgtcatccc ggg
493
<210> 2212
<211> 126
<212> PRT
<213> Homo sapiens
<400> 2212
Met Gly Met Thr Leu Arg Met Leu Ser Phe Ser Glu Ala Val Arg Val
Arg Thr Asp Leu Ala Thr Ala Pro Cys Pro Pro Gly Ala Pro Gly Leu
Gly Gly Pro Gly Arg Arg Leu Phe Gln Gly Ala Ser Leu Trp Phe Tyr
Asn Ile Phe Pro Phe Gly Gly Phe Val Pro Gly Arg Pro Pro Leu Gln
                        55
Leu Gly Ser Leu Ser Thr Glu Thr Gly Gln Glu Pro Pro Arg Gly Ala
                    70
Val Phe Gly Leu Arg Arg Leu Ala Val Pro His Phe Ser Asn Pro Lys
                                     90
Val His Gly Ser Ile Pro Phe Pro Ser Phe Leu Pro Val Pro Val Ser
                                105
Gly Phe Gly Asn Arg Phe Pro Leu Cys Ser Pro Arg Val Gln
                                                 125
                            120
<210> 2213
<211> 327
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<212> DNA <213> Homo sapiens <400> 2213 acgegteega eeggeagtte eggeagetge gggaaagetg egatgegete geegageatt gccggtgctt cgacacactg ggttatatcg ccctcaaagc acaggtctac gaaggttctg acggaaggcc cggccaatcc gatcgcggcc tcggcgctgc gcatcatccg ggcgcgcgtg tegeagetet ggggeaegte getgeteege aacggaeggg eggaacagag tgtggtggag ategeceggt tggtegaege gateaegtea egggaegagg aageegeeea gegtgeaetg ctcgaccaca atcgcagcgc gttggaa 327 <210> 2214 <211> 95 <212> PRT <213> Homo sapiens <400> 2214 Met Arg Ser Pro Ser Ile Ala Gly Ala Ser Thr His Trp Val Ile Ser Pro Ser Lys His Arg Ser Thr Lys Val Leu Thr Glu Gly Pro Ala Asn Pro Ile Ala Ala Ser Ala Leu Arg Ile Ile Arg Ala Arg Val Ser Gln 40 Leu Trp Gly Thr Ser Leu Leu Arg Asn Gly Arg Ala Glu Gln Ser Val Val Glu Ile Ala Arq Leu Val Asp Ala Ile Thr Ser Arg Asp Glu Glu Ala Ala Gln Arg Ala Leu Leu Asp His Asn Arg Ser Ala Leu Glu 90 95 <210> 2215 <211> 430 <212> DNA <213> Homo sapiens <400> 2215 ctggggatca tgccctacat cactgcgtcg atcatcctgc agctgctgac agtcgtgatc ccgaagctgg aaacccttaa gaaggagggc gcgtccggtc agaacaagat cacccagtac accepttace teactetegt gettggeetg ttgcaggeaa eggeettegt caegettgee acctecggee gtetatteae enntgeaget ntgeeagteg tetactecae eteggtette gaagtcgtcg tcatgatcct gactatgacg gccggtacga ccatcgtcat gtggatgggt gageteatea eegaeegegg tateggeaae ggtatgtega teatgatttt caeteagatt 360

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gcggcgcgtt tccctgactc gctgtggtct atcaaggtcg ctcgaaatgg cgccggtcag
420
gctcacgcgt
430
<210> 2216
<211> 143
<212> PRT
<213> Homo sapiens
<400> 2216
Leu Gly Ile Met Pro Tyr Ile Thr Ala Ser Ile Ile Leu Gln Leu Leu
Thr Val Val Ile Pro Lys Leu Glu Thr Leu Lys Lys Glu Gly Ala Ser
                                25
Gly Gln Asn Lys Ile Thr Gln Tyr Thr Arg Tyr Leu Thr Leu Val Leu
Gly Leu Leu Gln Ala Thr Ala Phe Val Thr Leu Ala Thr Ser Gly Arg
Leu Phe Thr Xaa Ala Ala Xaa Pro Val Val Tyr Ser Thr Ser Val Phe
                                        75
Glu Val Val Wat Ile Leu Thr Met Thr Ala Gly Thr Thr Ile Val
                                    90
Met Trp Met Gly Glu Leu Ile Thr Asp Arg Gly Ile Gly Asn Gly Met
                                105
            100
Ser Ile Met Ile Phe Thr Gln Ile Ala Ala Arg Phe Pro Asp Ser Leu
                            120
Trp Ser Ile Lys Val Ala Arg Asn Gly Ala Gly Gln Ala His Ala
    130
                        135
                                            140
<210> 2217
<211> 444
<212> DNA
<213> Homo sapiens
<400> 2217
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atgacgtggc tcgatgacga cgtgggcgcc gacctgttga atcaggctga ttccatggac
catgccctgg aggccaccgt cccaggtcgg gtcaccacgc cggacgccca agtcatccag
acctgtgccg tgttgcgtga ccttgctcgc gtggcagtca gccagctggg ccgaaatgac
gaggactota gggaaccagt cgatgcggag agagtacagg ctcaagcgnc gatgcgggag
gttttcgaga ccgccgaacg catggtgggg ctggccgccg ccgacgtggt gtgggtctct
gagtctgaga agggataccg cagcattcac gtcgctccgc tgagtgttgg cggcttgcta
cgagagaatg totttgctca gtcc
444
<210> 2218
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1631

<211> 148 <212> PRT <213> Homo sapiens <400> 2218 Thr Arg Ala Ala Ser Lys Asp Leu Ser Pro Ala Ile Val Thr Thr Ala Lys Arg Ala Met Thr Trp Leu Asp Asp Val Gly Ala Asp Leu Leu Asn Gln Ala Asp Ser Met Asp His Ala Leu Glu Ala Thr Val Pro 40 Gly Arg Val Thr Thr Pro Asp Ala Gln Val Ile Gln Thr Cys Ala Val 55 Leu Arg Asp Leu Ala Arg Val Ala Val Ser Gln Leu Gly Arg Asn Asp Glu Asp Ser Arg Glu Pro Val Asp Ala Glu Arg Val Gln Ala Gln Ala 90 Xaa Met Arg Glu Val Phe Glu Thr Ala Glu Arg Met Val Gly Leu Ala Ala Ala Asp Val Val Trp Val Ser Glu Ser Glu Lys Gly Tyr Arg Ser 120 Ile His Val Ala Pro Leu Ser Val Gly Gly Leu Leu Arg Glu Asn Val 135 Phe Ala Gln Ser 145 <210> 2219 <211> 688 <212> DNA <213> Homo sapiens <400> 2219 acgcgtaccg tcgttggcat gagcgtcctg ccactggaaa tttggctgtc attcagctac ggcattacga atatggcgtg gatgtggcta tggttcgacg agcccggaaa ccgttgggag tggtcgatcc ttttccccgc tgggtggctg accagcgctt tggtcagtca ggggttcggt ggaatgttcc atagtgtgca gattgcgcgt catgtcagca gttaccacgg catcatggtc getttegege tegttgggta eggatggett gegatgeaca aettgegtea eeetgatgag cgctattcga ttcgctcggc cttgataatc ggcatcggca tccagttcac ctgggaggca gtgctgatga tctcgggtat caggccgttg acatggcgcc cgcttgttat cgattctctc atogagacga atotoggogo toogttoatg ttgotoattg tgaaagottg gogogogoa cccgaaggaa ttcctggctc taccagtccg cgcccgaccg cccgtggcac agcgcgagtc tatatgaggg atgatettgt ttetegaege ettetaeage gteettgaga geetetgega gcgaagggcg cgggtgtagg tctccccggg gctcgttgtg gtccctcctc tgcgtgacgc

660

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agagccgtgt gatgaggcga agtcatga
<210> 2220
<211> 189
<212> PRT
<213> Homo sapiens
<400> 2220
Met Ser Val Leu Pro Leu Glu Ile Trp Leu Ser Phe Ser Tyr Gly Ile
Thr Asn Met Ala Trp Met Trp Leu Trp Phe Asp Glu Pro Gly Asn Arg
Trp Glu Trp Ser Ile Leu Phe Pro Ala Gly Trp Leu Thr Ser Ala Leu
Val Ser Gln Gly Phe Gly Gly Met Phe His Ser Val Gln Ile Ala Arg
His Val Ser Ser Tyr His Gly Ile Met Val Ala Phe Ala Leu Val Gly
Tyr Gly Trp Leu Ala Met His Asn Leu Arg His Pro Asp Glu Arg Tyr
                                    90
Ser Ile Arg Ser Ala Leu Ile Ile Gly Ile Gly Ile Gln Phe Thr Trp
                                105
Glu Ala Val Leu Met Ile Ser Gly Ile Arg Pro Leu Thr Trp Arg Pro
                            120
Leu Val Ile Asp Ser Leu Ile Glu Thr Asn Leu Gly Ala Pro Phe Met
                                            140
                        135
Leu Leu Ile Val Lys Ala Trp Arg Ala Pro Pro Glu Gly Ile Pro Gly
                                        155
Ser Thr Ser Pro Arg Pro Thr Ala Arg Gly Thr Ala Arg Val Tyr Met
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Tyr Lys Leu Asp Cys Glu Leu Pro Ala Leu Ser Arg Pro Leu Asp Lys
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Cys Ile Phe Thr Gly Val Pro Pro Ile Asp Ser Gly Ile Val His Asn
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Gly His Thr Gly Trp Val Val Ser Asp Glu Leu Gly Pro Val Gly Asn
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Glu Asp Tyr Cys Ala Val Ile Ala Arg Met Glu Asn Gly Val Met Cys
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Leu Asn His Leu Gln Val Cys Leu Gly Arg Asn Asn Arg Ala Leu Gln
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Phe Gln Pro Gly Ala Gly Thr Ser Met Gly Phe Asp Asp Met Lys Val
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Val Glu Ala Ala Lys Phe Val Arg Gly Val Leu Asp Gly Gln Gln Tyr
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Gly Pro Ala Leu Gly Thr Arg His Arg Trp Ile Gln Cys Ile Leu Ser
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1637

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His His Val Pro Gly Thr Glu Pro Tyr Leu Asp Leu Leu Gln Pro Ser
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Phe Val Ala Ile Thr Asp Lys Gln Met Thr Leu Asn Gly Ala Gly His
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Val Ile Cys His Arg Tyr Met His Arg Thr Met Gln Thr Ser Gln Ser
Pro Leu Ser Gln Thr Arg Leu Thr Ile Arg Asp Met Gln Thr Leu Ala
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Gly Leu Gly Leu Phe Pro Ile Gly Asp Ser Leu Val Pro Pro Trp Pro
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Leu Met Pro Thr Ala Val Trp Lys Ala Gly Ser Leu Leu Arg Arg Gln
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465	**- 7	<b>n</b>	·	T		TT	71-	T	T ON		T10	N ×cr	Mot	Tan	
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_	_	<b></b> '		485	<b>61</b>	T1 -	0	***		7	7	T	~1··		Dwa
Ser	Pro	Inr		Tyr	GIY	ııe	ser		Asp	ASP	Leu	гуѕ		ASP	PIO
_	_	_	500	_	_	_		505		•••	m1		510	•	
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Ile Thr Val Asn 625	Glu Val Pro 610 Val	Leu Arg 595 Ile Leu	Phe 580 Glu Pro Leu	565 Arg Glu Val Gln	Val Glu Lys Ala 630	Phe Lys Glu 615 Phe	Ser Leu 600 Ser Ile	Leu 585 Glu Ile Ser	570 Ser Leu Glu Gln	Ser Gln Glu Leu 635	Glu Lys Pro 620 Lys	Phe Leu 605 Ser Leu	Lys 590 Leu Ala Glu	575 Asn Glu Lys Gly	Ile Arg Ile Phe
Ile Thr Val Asn 625 Ala	Glu Val Pro 610 Val	Leu Arg 595 Ile Leu Met	Phe 580 Glu Pro Leu Ala	565 Arg Glu Val Gln Asp 645	Val Glu Lys Ala 630 Met	Phe Lys Glu 615 Phe Val	Ser Leu 600 Ser Ile Tyr	Leu 585 Glu Ile Ser Val	570 Ser Leu Glu Gln Thr 650	Ser Gln Glu Leu 635 Gln	Glu Lys Pro 620 Lys Ser	Phe Leu 605 Ser Leu Ala	Lys 590 Leu Ala Glu Gly	575 Asn Glu Lys Gly Arg 655	Ile Arg Ile Phe 640 Leu
Ile Thr Val Asn 625 Ala	Glu Val Pro 610 Val Leu	Leu Arg 595 Ile Leu Met	Phe 580 Glu Pro Leu Ala	565 Arg Glu Val Gln Asp 645	Val Glu Lys Ala 630 Met	Phe Lys Glu 615 Phe Val	Ser Leu 600 Ser Ile Tyr	Leu 585 Glu Ile Ser Val	570 Ser Leu Glu Gln Thr 650	Ser Gln Glu Leu 635 Gln	Glu Lys Pro 620 Lys Ser	Phe Leu 605 Ser Leu Ala	Lys 590 Leu Ala Glu Gly	575 Asn Glu Lys Gly Arg 655	Ile Arg Ile Phe 640 Leu
Ile Thr Val Asn 625 Ala Met	Glu Val Pro 610 Val Leu Arg	Leu Arg 595 Ile Leu Met	Phe 580 Glu Pro Leu Ala Ile 660	565 Arg Glu Val Gln Asp 645 Phe	Val Glu Lys Ala 630 Met	Phe Lys Glu 615 Phe Val	Ser Leu 600 Ser Ile Tyr	Leu 585 Glu Ile Ser Val Leu 665	570 Ser Leu Glu Gln Thr 650 Asn	Ser Gln Glu Leu 635 Gln Arg	Glu Lys Pro 620 Lys Ser Gly	Phe Leu 605 Ser Leu Ala Trp	Lys 590 Leu Ala Glu Gly Ala 670	S75 Asn Glu Lys Gly Arg 655 Gln	Ile Arg Ile Phe 640 Leu Leu
Ile Thr Val Asn 625 Ala Met	Glu Val Pro 610 Val Leu	Leu Arg 595 Ile Leu Met Ala Lys	Phe 580 Glu Pro Leu Ala Ile 660	565 Arg Glu Val Gln Asp 645 Phe	Val Glu Lys Ala 630 Met	Phe Lys Glu 615 Phe Val	Ser Leu 600 Ser Ile Tyr	Leu 585 Glu Ile Ser Val Leu 665	570 Ser Leu Glu Gln Thr 650 Asn	Ser Gln Glu Leu 635 Gln Arg	Glu Lys Pro 620 Lys Ser Gly	Phe Leu 605 Ser Leu Ala Trp	Lys 590 Leu Ala Glu Gly Ala 670	S75 Asn Glu Lys Gly Arg 655 Gln	Ile Arg Ile Phe 640 Leu Leu
Ile Thr Val Asn 625 Ala Met Thr	Glu Val Pro 610 Val Leu Arg	Leu Arg 595 Ile Leu Met Ala Lys 675	Phe 580 Glu Pro Leu Ala Ile 660 Thr	S65 Arg Glu Val Gln Asp 645 Phe Leu	Val Glu Lys Ala 630 Met Glu Asn	Phe Lys Glu 615 Phe Val Ile Leu	Ser Leu 600 Ser Ile Tyr Val Cys 680	Leu 585 Glu Ile Ser Val Leu 665 Lys	570 Ser Leu Glu Gln Thr 650 Asn	Ser Gln Glu Leu 635 Gln Arg	Glu Lys Pro 620 Lys Ser Gly Asp	Phe Leu 605 Ser Leu Ala Trp Lys 685	Lys 590 Leu Ala Glu Gly Ala 670 Arg	575 Asn Glu Lys Gly Arg 655 Gln Met	Ile Arg Ile Phe 640 Leu Leu Trp
Ile Thr Val Asn 625 Ala Met Thr	Glu Val Pro 610 Val Leu Arg Asp	Leu Arg 595 Ile Leu Met Ala Lys 675	Phe 580 Glu Pro Leu Ala Ile 660 Thr	S65 Arg Glu Val Gln Asp 645 Phe Leu	Val Glu Lys Ala 630 Met Glu Asn	Phe Lys Glu 615 Phe Val Ile Leu Arg	Ser Leu 600 Ser Ile Tyr Val Cys 680	Leu 585 Glu Ile Ser Val Leu 665 Lys	570 Ser Leu Glu Gln Thr 650 Asn	Ser Gln Glu Leu 635 Gln Arg	Glu Lys Pro 620 Lys Ser Gly Asp	Phe Leu 605 Ser Leu Ala Trp Lys 685	Lys 590 Leu Ala Glu Gly Ala 670 Arg	575 Asn Glu Lys Gly Arg 655 Gln Met	Ile Arg Ile Phe 640 Leu Leu Trp
Ile Thr Val Asn 625 Ala Met Thr	Glu Val Pro 610 Val Leu Arg Asp Ser 690	Leu Arg 595 Ile Leu Met Ala Lys 675 Met	Phe 580 Glu Pro Leu Ala Ile 660 Thr	S65 Arg Glu Val Gln Asp 645 Phe Leu	Val Glu Lys Ala 630 Met Glu Asn Leu	Phe Lys Glu 615 Phe Val Ile Leu Arg 695	Ser Leu 600 Ser Ile Tyr Val Cys 680 Gln	Leu 585 Glu Ile Ser Val Leu 665 Lys	570 Ser Leu Glu Gln Thr 650 Asn Met	Ser Gln Glu Leu 635 Gln Arg Ile Lys	Glu Lys Pro 620 Lys Ser Gly Asp Leu 700	Phe Leu 605 Ser Leu Ala Trp Lys 685 Pro	Lys 590 Leu Ala Glu Gly Ala 670 Arg	575 Asn Glu Lys Gly Arg 655 Gln Met	Ile Arg Ile Phe 640 Leu Leu Trp
Ile Thr Val Asn 625 Ala Met Thr Gln Val	Glu Val Pro 610 Val Leu Arg Asp	Leu Arg 595 Ile Leu Met Ala Lys 675 Met	Phe 580 Glu Pro Leu Ala Ile 660 Thr	S65 Arg Glu Val Gln Asp 645 Phe Leu	Val Glu Lys Ala 630 Met Glu Asn Leu Lys	Phe Lys Glu 615 Phe Val Ile Leu Arg 695	Ser Leu 600 Ser Ile Tyr Val Cys 680 Gln	Leu 585 Glu Ile Ser Val Leu 665 Lys	570 Ser Leu Glu Gln Thr 650 Asn Met	Ser Gln Glu Leu 635 Gln Arg Ile Lys Phe	Glu Lys Pro 620 Lys Ser Gly Asp Leu 700 Glu	Phe Leu 605 Ser Leu Ala Trp Lys 685 Pro	Lys 590 Leu Ala Glu Gly Ala 670 Arg	575 Asn Glu Lys Gly Arg 655 Gln Met	Ile Arg Ile Phe 640 Leu Trp Val Asp
Ile Thr Val Asn 625 Ala Met Thr Gln Val 705	Glu Val Pro 610 Val Leu Arg Asp Ser 690 Lys	Leu Arg 595 Ile Leu Met Ala Lys 675 Met Lys	Phe 580 Glu Pro Leu Ala Ile 660 Thr Cys	Glu Val Gln Asp 645 Phe Leu Pro Glu	Val Glu Lys Ala 630 Met Glu Asn Leu Lys 710	Phe Lys Glu 615 Phe Val Ile Leu Arg 695 Lys	Ser Leu 600 Ser Ile Tyr Val Cys 680 Gln Asn	Leu 585 Glu Ile Ser Val Leu 665 Lys Phe	570 Ser Leu Glu Gln Thr 650 Asn Met Arg	Ser Gln Glu Leu 635 Gln Arg Ile Lys Phe 715	Glu Lys Pro 620 Lys Ser Gly Asp Leu 700 Glu	Phe Leu 605 Ser Leu Ala Trp Lys 685 Pro	Lys 590 Leu Ala Glu Gly Ala 670 Arg Glu Leu	S75 Asn Glu Lys Gly Arg 655 Gln Met Glu Tyr	Ile Arg Ile Phe 640 Leu Trp Val Asp 720
Ile Thr Val Asn 625 Ala Met Thr Gln Val 705	Glu Val Pro 610 Val Leu Arg Asp Ser 690	Leu Arg 595 Ile Leu Met Ala Lys 675 Met Lys	Phe 580 Glu Pro Leu Ala Ile 660 Thr Cys	Glu Val Gln Asp 645 Phe Leu Pro Glu Glu	Val Glu Lys Ala 630 Met Glu Asn Leu Lys 710	Phe Lys Glu 615 Phe Val Ile Leu Arg 695 Lys	Ser Leu 600 Ser Ile Tyr Val Cys 680 Gln Asn	Leu 585 Glu Ile Ser Val Leu 665 Lys Phe	570 Ser Leu Glu Gln Thr 650 Asn Met Arg Pro	Ser Gln Glu Leu 635 Gln Arg Ile Lys Phe 715	Glu Lys Pro 620 Lys Ser Gly Asp Leu 700 Glu	Phe Leu 605 Ser Leu Ala Trp Lys 685 Pro	Lys 590 Leu Ala Glu Gly Ala 670 Arg Glu Leu	S75 Asn Glu Lys Gly Arg 655 Gln Met Glu Tyr	Ile Arg Ile Phe 640 Leu Trp Val Asp 720
Ile Thr Val Asn 625 Ala Met Thr Gln Val 705 Leu	Glu Val Pro 610 Val Leu Arg Asp Ser 690 Lys Asn	Leu Arg 595 Ile Leu Met Ala Lys 675 Met Lys His	Phe 580 Glu Pro Leu Ala Ile 660 Thr Cys Ile Asn	Glu Val Gln Asp 645 Phe Leu Pro Glu Glu 725	Val Glu Lys Ala 630 Met Glu Asn Leu Lys 710 Ile	Phe Lys Glu 615 Phe Val Ile Leu Arg 695 Lys	Ser Leu 600 Ser Ile Tyr Val Cys 680 Gln Asn Glu	Leu 585 Glu Ile Ser Val Leu 665 Lys Phe Phe Leu	570 Ser Leu Glu Gln Thr 650 Asn Met Arg Pro	Ser Gln Glu Leu 635 Gln Arg Ile Lys Phe 715 Arg	Glu Lys Pro 620 Lys Ser Gly Asp Leu 700 Glu Met	Phe Leu 605 Ser Leu Ala Trp Lys 685 Pro Arg	Lys 590 Leu Ala Glu Gly Ala 670 Arg Glu Leu	S75 Asn Glu Lys Gly Arg 655 Gln Met Glu Tyr	Ile Arg Ile Phe 640 Leu Trp Val Asp 720 Gly
Ile Thr Val Asn 625 Ala Met Thr Gln Val 705 Leu	Glu Val Pro 610 Val Leu Arg Asp Ser 690 Lys	Leu Arg 595 Ile Leu Met Ala Lys 675 Met Lys His	Phe 580 Glu Pro Leu Ala Ile 660 Thr Cys Ile Asn His	Glu Val Gln Asp 645 Phe Leu Pro Glu Glu 725	Val Glu Lys Ala 630 Met Glu Asn Leu Lys 710 Ile	Phe Lys Glu 615 Phe Val Ile Leu Arg 695 Lys	Ser Leu 600 Ser Ile Tyr Val Cys 680 Gln Asn Glu	Leu 585 Glu Ile Ser Val Leu 665 Lys Phe Phe Leu Leu	570 Ser Leu Glu Gln Thr 650 Asn Met Arg Pro	Ser Gln Glu Leu 635 Gln Arg Ile Lys Phe 715 Arg	Glu Lys Pro 620 Lys Ser Gly Asp Leu 700 Glu Met	Phe Leu 605 Ser Leu Ala Trp Lys 685 Pro Arg	Lys 590 Leu Ala Glu Gly Ala 670 Arg Glu Leu Lys	S75 Asn Glu Lys Gly Arg 655 Gln Met Glu Tyr	Ile Arg Ile Phe 640 Leu Trp Val Asp 720 Gly
Ile Thr Val Asn 625 Ala Met Thr Gln Val 705 Leu Lys	Glu Val Pro 610 Val Leu Arg Asp Ser 690 Lys Asn Thr	Leu Arg 595 Ile Leu Met Ala Lys 675 Met Lys His	Phe 580 Glu Pro Leu Ala Ile 660 Thr Cys Ile Asn His 740	Glu Val Gln Asp 645 Phe Leu Pro Glu Glu 725 Lys	Val Glu Lys Ala 630 Met Glu Asn Leu Lys 710 Ile Tyr	Phe Lys Glu 615 Phe Val Ile Leu Arg 695 Lys Gly Val	Ser Leu 600 Ser Ile Tyr Val Cys 680 Gln Asn Glu His	Leu 585 Glu Ile Ser Val Leu 665 Lys Phe Phe Leu 745	570 Ser Leu Glu Gln Thr 650 Asn Met Arg Pro Ile 730 Phe	Ser Gln Glu Leu 635 Gln Arg Ile Lys Phe 715 Arg	Glu Lys Pro 620 Lys Ser Gly Asp Leu 700 Glu Met Lys	Phe Leu 605 Ser Leu Ala Trp Lys 685 Pro Arg Pro Leu	Lys 590 Leu Ala Glu Gly Ala 670 Arg Glu Leu Lys Glu 750	S75 Asn Glu Lys Gly Arg 655 Gln Met Glu Tyr Met 735 Leu	Ile Arg Ile Phe 640 Leu Trp Val Asp 720 Gly Ser
Ile Thr Val Asn 625 Ala Met Thr Gln Val 705 Leu Lys	Glu Val Pro 610 Val Leu Arg Asp Ser 690 Lys Asn	Leu Arg 595 Ile Leu Met Ala Lys 675 Met Lys Ile Leu	Phe 580 Glu Pro Leu Ala Ile 660 Thr Cys Ile Asn His 740	Glu Val Gln Asp 645 Phe Leu Pro Glu Glu 725 Lys	Val Glu Lys Ala 630 Met Glu Asn Leu Lys 710 Ile Tyr	Phe Lys Glu 615 Phe Val Ile Leu Arg 695 Lys Gly Val	Ser Leu 600 Ser Ile Tyr Val Cys 680 Gln Asn Glu His Arg	Leu 585 Glu Ile Ser Val Leu 665 Lys Phe Phe Leu 745	570 Ser Leu Glu Gln Thr 650 Asn Met Arg Pro Ile 730 Phe	Ser Gln Glu Leu 635 Gln Arg Ile Lys Phe 715 Arg	Glu Lys Pro 620 Lys Ser Gly Asp Leu 700 Glu Met Lys	Phe Leu 605 Ser Leu Ala Trp Lys 685 Pro Arg Pro Leu Val	Lys 590 Leu Ala Glu Gly Ala 670 Arg Glu Leu Lys Glu 750	S75 Asn Glu Lys Gly Arg 655 Gln Met Glu Tyr Met 735 Leu	Ile Arg Ile Phe 640 Leu Trp Val Asp 720 Gly Ser
Ile Thr Val Asn 625 Ala Met Thr Gln Val 705 Leu Lys	Glu Val Pro 610 Val Leu Arg Asp Ser 690 Lys Asn Thr	Leu Arg 595 Ile Leu Met Ala Lys 675 Met Lys His Ile Leu 755	Phe 580 Glu Pro Leu Ala Ile 660 Thr Cys Ile Asn His 740 Gln	Glu Val Gln Asp 645 Phe Leu Pro Glu Glu 725 Lys	Val Glu Lys Ala 630 Met Glu Asn Leu Lys 710 Ile Tyr	Phe Lys Glu 615 Phe Val Ile Leu Arg 695 Lys Gly Val Thr	Ser Leu 600 Ser Ile Tyr Val Cys 680 Gln Asn Glu His Arg 760	Leu 585 Glu Ile Ser Val Leu 665 Lys Phe Leu Leu 745 Ser	570 Ser Leu Glu Gln Thr 650 Asn Met Arg Pro Ile 730 Phe Thr	Ser Gln Glu Leu 635 Gln Arg Ile Lys Phe 715 Arg Pro Leu	Glu Lys Pro 620 Lys Ser Gly Asp Leu 700 Glu Met Lys Lys	Phe Leu 605 Ser Leu Ala Trp Lys 685 Pro Arg Pro Leu Val 765	Lys 590 Leu Ala Glu Gly Ala 670 Arg Glu Leu Lys Glu 750 Glu	S75 Asn Glu Lys Gly Arg 655 Gln Met Glu Tyr Met 735 Leu Leu	Ile Arg Ile Phe 640 Leu Trp Val Asp 720 Gly Ser Thr

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Asn Gly 1025	Val 1010 Gly	995 Gln ) Glu	Lys Asn Asn	Ile Gly	Asn Pro	Leu 1015 Val	1000 Phe Leu	Ser Val Glu	Val Val	Asp Ile	Glu 1020 Cys	Val Ser	Gln His Arg	Leu Met	Ile Arg 1040
Asn Gly 1025	Val 1010 Gly	995 Gln ) Glu	Lys Asn	Ile Gly Gln	Asn Pro 1030 Ile	Leu 1015 Val	1000 Phe Leu	Ser Val Glu	Val Val Ile	Asp Ile 1035 Arg	Glu 1020 Cys	Val Ser	Gln His Arg	Leu Met Leu	Ile Arg 1040 Ser
Asn Gly 1025 Tyr	Val 1010 Gly Ule	995 Gln Glu Ser	Lys Asn Asn Ser	Ile Gly Gln 1045	Asn Pro 1030 Ile	Leu 1015 Val ) Glu	1000 Phe Leu Arg	Ser Val Glu Pro	Val Val Ile	Asp Ile 1039 Arg	Glu 1020 Cys Ile	1009 Val Ser Val	Gln His Arg	Leu Met Leu 1055	Ile Arg 1040 Ser
Asn Gly 1025 Tyr	Val 1010 Gly Ule	995 Gln Glu Ser	Lys Asn Asn	Ile Gly Gln 1045 Asn	Asn Pro 1030 Ile	Leu 1015 Val ) Glu	1000 Phe Leu Arg	Ser Val Glu Pro	Val Val Ile 1050 Ala	Asp Ile 1039 Arg	Glu 1020 Cys Ile	1009 Val Ser Val	Gln His Arg	Leu Met Leu 1055 Cys	Ile Arg 1040 Ser
Asn Gly 1025 Tyr Ser	Val 1010 Gly Ile Ser	995 Gln Glu Ser Leu	Lys Asn Asn Ser Ser	Ile Gly Gln 1045 Asn	Asn Pro 1030 Ile Ala	Leu 1015 Val ) Glu Lys	1000 Phe Leu Arg	Ser Val Glu Pro Val 1069	Val Val Ile 1050 Ala	Asp Ile 1035 Arg His	Glu 1020 Cys Ile Trp	Val Ser Val	Gln His Arg Ala Gly	Leu Met Leu 1055 Cys	Ile Arg 1040 Ser Ser
Asn Gly 1025 Tyr Ser	Val 1010 Gly Ile Ser	995 Gln Glu Ser Leu	Asn Asn Ser Ser 1060	Ile Gly Gln 1045 Asn	Asn Pro 1030 Ile Ala	Leu 1015 Val ) Glu Lys	1000 Phe Leu Arg	Ser Val Glu Pro Val 1065	Val Val Ile 1050 Ala	Asp Ile 1035 Arg His	Glu 1020 Cys Ile Trp	Val Ser Val	Gln His Arg Ala Gly 1070 Val	Leu Met Leu 1055 Cys	Ile Arg 1040 Ser Ser
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Asn Gly 1025 Tyr Ser Ala	Val 1010 Gly Ile Ser	995 Gln Glu Ser Leu Ser 1075 His	Asn Asn Ser Ser 1060 Thr	Ile Gly Gln 1045 Asn ) Phe	Asn Pro 1030 Ile Ala Asn	Leu 1015 Val ) Glu Lys	1000 Phe Leu Arg Asp His 1080	Ser Val Glu Pro Val 1065 Pro	Val  Ile 1050 Ala Asn	Asp Ile 1035 Arg His	Glu 1020 Cys Ile Trp	Val Ser Val Leu Pro 1085	Gln His Arg Ala Gly 1070 Val	Leu Met Leu 1059 Cys	Ile Arg 1040 Ser Ser Leu
Asn Gly 1025 Tyr Ser Ala Glu	Val 1010 Gly Ile Ser Thr	995 Gln Glu Ser Leu Ser 1075 His	Asn Asn Ser Ser 1060 Thr	Gly Gln 1045 Asn Phe Gln	Asn Pro 1030 Ile Ala Asn Gly	Leu 1015 Val ) Glu Lys Phe Phe 1095	1000 Phe Leu Arg Asp His 1080 Asn	Ser Val Glu Pro Val 1065 Pro Ile	Val  Val  Ile 1050 Ala  Asn  Ser	Asp Ile 1035 Arg His Val	Glu 1020 Cys Ile Trp Arg	Val Ser Val Leu Pro 1085 Gln	Gln His Arg Ala Gly 1070 Val Thr	Leu Met Leu 1055 Cys Pro	Ile Arg 1040 Ser Ser Leu Leu
Asn Gly 1025 Tyr Ser Ala Glu	Val 1010 Gly Ile Ser Thr Leu 1090 Ser	995 Gln Glu Ser Leu Ser 1075 His	Asn Asn Ser Ser 1060 Thr Ile	Gly Gln 1045 Asn Phe Gln	Asn Pro 1030 Ile Ala Asn Gly	Leu 1015 Val ) Glu Lys Phe 1095 Val	1000 Phe Leu Arg Asp His 1080 Asn	Ser Val Glu Pro Val 1065 Pro Ile	Val  Val  Ile 1050 Ala  Asn  Ser	Asp Ile 1035 Arg His Val	Glu 1020 Cys Ile Trp Arg Thr 1100 Thr	Val Ser Val Leu Pro 1085 Gln	Gln His Arg Ala Gly 1070 Val Thr	Leu Met Leu 1055 Cys Pro	Ile Arg 1040 Ser Ser Leu Leu
Asn Gly 1025 Tyr Ser Ala Glu Leu 1105	Val 1010 Gly Ile Ser Thr Leu 1090 Ser	995 Gln Glu Ser Leu Ser 1075 His	Asn Asn Ser Ser 1060 Thr Ile	Gly Gln 1045 Asn Phe Gln Lys	Asn Pro 1030 Ile Ala Asn Gly Pro 1110	Leu 1015 Val ) Glu Lys Phe 1095 Val	1000 Phe Leu Arg Asp His 1080 Asn	Ser Val Glu Pro Val 1069 Pro Ile	Val  Ile 1050 Ala Asn Ser Ala	Asp Ile 1039 Arg His Val His Ile 1119	Glu 1020 Cys Ile Trp Arg Thr 1100 Thr	Val Ser Val Leu Pro 1085 Gln Lys	Gln His Arg Ala Gly 1070 Val Thr	Leu Met Leu 1055 Cys Pro Arg	Arg 1040 Ser Ser Leu Leu Pro 1120
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Asn Gly 1025 Tyr Ser Ala Glu Leu 1105 Lys	Val 1010 Gly Ile Ser Thr Leu 1090 Ser	995 Gln Glu Ser Leu Ser 1075 His Met	Asn Asn Ser Ser 1060 Thr Ile Ala	Gly Gln 1045 Asn Phe Gln Lys Ile	Asn Pro 1030 Ile Ala Asn Gly Pro 1110 Val	Leu 1015 Val ) Glu Lys Phe 1095 Val	1000 Phe Leu Arg Asp His 1080 Asn Tyr	Ser Val Glu Pro Val 1069 Pro Ile His	Val Val Ile 1050 Ala Asn Ser Ala Ser 1130	Asp Ile 1035 Arg His Val His Ile 1115 Arg	Glu 1020 Cys Ile Trp Arg Thr 1100 Thr	Val Ser Val Leu Pro 1085 Gln Lys	Gln His His Arg Ala Gly 1070 Val Thr His	Leu Met Leu 1055 Cys Pro Arg Ser Arg	Ile Arg 1040 Ser Ser Leu Leu Pro 1120 Leu
Asn Gly 1025 Tyr Ser Ala Glu Leu 1105 Lys	Val 1010 Gly Ile Ser Thr Leu 1090 Ser	995 Gln Glu Ser Leu Ser 1075 His Met	Asn Asn Ser Ser 1060 Thr Ile Ala Val	Gly Gln 1045 Asn Phe Gln Lys Ile 1125 Ile	Asn Pro 1030 Ile Ala Asn Gly Pro 1110 Val	Leu 1015 Val ) Glu Lys Phe 1095 Val	1000 Phe Leu Arg Asp His 1080 Asn Tyr	Ser Val Glu Pro Val 1069 Pro Ile His	Val Val Ile 1050 Ala Asn Ser Ala Ser 1130 Ala	Asp Ile 1035 Arg His Val His Ile 1115 Arg	Glu 1020 Cys Ile Trp Arg Thr 1100 Thr	Val Ser Val Leu Pro 1085 Gln Lys	Gln His His Arg Ala Gly 1070 Val Thr His	Leu Met Leu 1055 Cys Pro Arg Ser Arg 1135 Arg	Ile Arg 1040 Ser Ser Leu Leu Pro 1120 Leu
Asn Gly 1025 Tyr Ser Ala Glu Leu 1105 Lys	Val 1010 Gly Ile Ser Thr Leu 1090 Ser Lys	995 Gln Glu Ser Leu Ser 1075 His Met	Asn Asn Ser 1060 Thr Ile Ala Val	Gly Gln 1045 Asn Phe Gln Lys Ile 1125 Ile	Asn Pro 1030 Ile Ala Asn Gly Pro 1110 Val Leu	Leu 1015 Val Glu Lys Phe 1095 Val Phe	1000 Phe Leu Arg Asp His 1080 Asn Tyr Val	Ser Val Glu Pro Val 1065 Pro Ile His Pro Cys 1145	Val Val Ile 1050 Ala Asn Ser Ala Ser 1130 Ala	Asp Ile 1039 Arg His Val His Ile 1119 Arg	Glu 1020 Cys Ile Trp Arg Thr 1100 Thr Lys	Val Val Ser Val Leu Pro 1085 Gln Lys	Gln His His Arg Ala Gly 1070 Val Thr His Thr	Leu Met Leu 1055 Cys Pro Arg Ser Arg	Ile Arg 1040 Ser Ser Leu Pro 1120 Leu Gln
Asn Gly 1025 Tyr Ser Ala Glu Leu 1105 Lys Thr Arg	Val 1010 Gly Ile Ser Thr Leu 1090 Ser Lys Ala	995 Glu Glu Ser Leu Ser 1075 His Met Pro Ile Leu 1155	Asn Asn Ser Ser 1060 Thr Ile Ala Val Asp 1140 His	Gly Gln 1045 Asn Phe Gln Lys Ile 1125 Ile Cys	Asn Pro 1030 Ile Ala Asn Gly Pro 1110 Val Leu Thr	Leu 1015 Val Glu Lys Phe 1095 Val Phe Thr	1000 Phe Leu Arg Asp His 1080 Asn Tyr Val Thr Lys 1160	Ser Val Glu Pro Val 1065 Pro Ile His Pro Cys 1145 Asp	Val  Val  Ile 1050 Ala  Asn  Ser Ala  Ser 1130 Ala  Leu	Asp Ile 1039 Arg His Val His Ile 1119 Arg Ala Ile	Glu 1020 Cys Ile Trp Arg Thr 1100 Thr Lys Asp	Val Ser Val Leu Pro 1085 Gln Lys Gln Ile	Gln His His Arg Ala Gly 1070 Val Thr His Thr Cln 1150 Leu	Leu Met Leu 1055 Cys Pro Arg Ser Arg 1135 Arg	Ile Arg 1040 Ser Ser Leu Leu Pro 1120 Leu Gln Lys
Asn Gly 1025 Tyr Ser Ala Glu Leu 1105 Lys Thr Arg	Val 1010 Gly Ile Ser Thr Leu 1090 Ser Lys Ala	995 Glu Glu Ser Leu Ser 1075 His Met Pro Ile Leu 1155	Asn Asn Ser Ser 1060 Thr Ile Ala Val Asp 1140 His	Gly Gln 1045 Asn Phe Gln Lys Ile 1125 Ile Cys	Asn Pro 1030 Ile Ala Asn Gly Pro 1110 Val Leu Thr	Leu 1015 Val Glu Lys Phe 1095 Val Phe Thr	1000 Phe Leu Arg Asp His 1080 Asn Tyr Val Thr Lys 1160	Ser Val Glu Pro Val 1065 Pro Ile His Pro Cys 1145 Asp	Val  Val  Ile 1050 Ala  Asn  Ser Ala  Ser 1130 Ala  Leu	Asp Ile 1039 Arg His Val His Ile 1119 Arg Ala Ile	Glu 1020 Cys Ile Trp Arg Thr 1100 Thr Lys Asp Pro	Val Val Ser Val Leu Pro 1085 Gln Lys Gln Ile Tyr 1165 Gly	Gln His His Arg Ala Gly 1070 Val Thr His Thr Cln 1150 Leu	Leu Met Leu 1055 Cys Pro Arg Ser Arg 1135 Arg	Ile Arg 1040 Ser Ser Leu Leu Pro 1120 Leu Gln Lys
Asn Gly 1025 Tyr Ser Ala Glu Leu 1105 Lys Thr Arg Leu	Val 1010 Gly Ile Ser Thr Leu 1090 Ser Lys Ala Phe	995 Glu Ser Leu Ser 1075 His Met Pro Ile Leu 1155 Asp	Asn Asn Ser Ser 1060 Thr Ile Ala Val Asp 1140 His	Gly Gln 1045 Asn Phe Gln Lys Ile 1125 Ile Cys Thr	Asn Pro 1030 Ile Ala Asn Gly Pro 1110 Val Leu Thr	Leu 1015 Val Glu Lys Phe 1095 Val Phe Thr Glu Lys 1175	Asp His 1080 Asn Tyr Val Thr Lys Glu	Ser Val Glu Pro Val 1065 Pro Ile His Pro Cys 1145 Asp	Val  Ile 1050 Ala Asn Ser Ala Ser 1130 Ala Leu Leu	Asp Ile 1039 Arg His Val His Ile 1119 Arg Ala Ile Leu	Glu 1020 Cys Ile Trp Arg Thr 1100 Thr Lys Asp Pro Asn 1180	Val Val Ser Val Leu Pro 1085 Gln Lys Gln Ile Tyr 1165 Gly	Gln His His Arg Ala Gly 1070 Val Thr His Thr Usl Cln 1150 Leu Val	Leu Met Leu 1055 Cys Pro Arg Ser Arg 1135 Arg Glu Gly	Ile Arg 1040 Ser Ser Leu Pro 1120 Leu Gln Lys
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				Met Asp Thr Gln
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	Lys Ile His		Val Asp Tyr	Pro Ile Tyr Asp
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Ile Arg His His	Glu Asp Asn			Ala Gln Lys Val
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Pro His Lys Leu  Asn Leu Leu Leu  1460  Leu Gln Ser Asp  1475	1430 Asn Asn Pro 1445 Gln Ala His Thr Glu Glu	Leu Leu A Lys Phe A Leu Ser A 1465 Ile Leu S 1480	Arg Gln Leu 1435 Asn Asp Pro 1450 Arg Met Gln Ser Lys Ala	His Val Lys Thr 1455 Leu Ser Ala Glu 1470 Ile Arg Leu Ile 1485
Pro His Lys Leu  Asn Leu Leu Leu 1460  Leu Gln Ser Asp 1475  Gln Ala Cys Val	1430 Asn Asn Pro 1445 Gln Ala His Thr Glu Glu	Leu Leu A Lys Phe A Leu Ser A 1465 Ile Leu S 1480 Ser Ser A	Arg Gln Leu 1435 Asn Asp Pro 1450 Arg Met Gln Ser Lys Ala	His Val Lys Thr 1455 Leu Ser Ala Glu 1470 Ile Arg Leu Ile 1485 Leu Ser Pro Ala
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gtcagtggcc ctgggagatc cataagtggc ccaattccag ctggacggac tgtcagtaat
tcagtcccag gaagaccagt gagcagcttg ggacctgggc aaacagttag tagctcaggt
cccactataa agcctaagtg cac
623
<210> 2240
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<212> PRT
<213> Homo sapiens
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Ala Ser Arg Thr Gln Lys Ser Ala Val Glu His Lys Ala Lys Lys Ser
Leu Ser His Pro Ser His Ser Arg Pro Gly Pro Met Val Thr Pro His
                                25
Asn Lys Ala Lys Ser Pro Gly Val Arg Gln Pro Gly Ser Ser Ser
Ser Ala Pro Gly Gln Pro Ser Thr Gly Val Ala Arg Pro Thr Val Ser
                        55
Ser Gly Pro Val Pro Arg Arg Gln Asn Gly Ser Ser Ser Gly Pro
                                        75
Glu Arg Ser Ile Ser Gly Ser Lys Lys Pro Thr Asn Asp Ser Asn Pro
                85
Ser Arg Arg Thr Val Ser Gly Thr Cys Gly Pro Gly Gln Pro Ala Ser
                                105
Ser Ser Gly Gly Pro Gly Arg Pro Ile Ser Gly Ser Val Ser Ser Ala
                            120
Arg Pro Leu Gly Ser Ser Arg Gly Pro Gly Arg Pro Val Ser Ser Pro
                        135
His Glu Leu Arg Arg Pro Val Ser Gly Leu Gly Pro Pro Gly Arg Ser
                                        155
                    150
Val Ser Gly Pro Gly Arg Ser Ile Ser Gly Pro Ile Pro Ala Gly Arg
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170
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Thr Val Ser Asn Ser Val Pro Gly Arg Pro Val Ser Ser Leu Gly Pro
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Gly Gln Thr Val Ser Ser Ser Gly Pro Thr Ile Lys Pro Lys Cys
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gtggccgaga tcgtgggcag gcaaggctgc aagattaagg ccttgagggc caagaccaac
acctacatta gaaccccggg aaygggcgag gaaccagtgt tcatggtgac agggcgacgg
gaggacgtgg ccacageceg gegggaaate ateteageag eggageaett eteeatgate
cgtgcctccc gcaacaagtc aggcgccgcc tttggtgtgg ctcctgctct gcccggccag
gtgaccatcc gtgtgcgggt gccctaccgc gtggtggggc tggtggtggg ccccaaaggg
gcaaccatca agcgcatcca gcagcaaacc aacacataca ttatcacacc aagccgtgac
cgcgaccccg tgttcgagat cacgggtgcc ccaggcaacg tggagcgtgc gcgcgaggag
atcgagacgo acatcgcggt gcgcactggc aagatcctcg agtacaacaa tgaaaacgac
ttcctggcgg ggagccccga cgcagcaatc gatagccgct actccgacgc ctggcgggtg
caccagooog gotgoaagoo cototocaco ttooggoaga acagootggg otgoag
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<211> 218
<212> PRT
<213> Homo sapiens
<400> 2242
Xaa Arg Val Lys Gly Ser Ser Asn Thr Thr Glu Cys Val Pro Val Pro
Thr Ser Glu His Val Ala Glu Ile Val Gly Arg Gln Gly Cys Lys Ile
                                 25
Lys Ala Leu Arg Ala Lys Thr Asn Thr Tyr Ile Arg Thr Pro Gly Arg
Gly Glu Glu Pro Val Phe Met Val Thr Gly Arg Arg Glu Asp Val Ala
Thr Ala Arg Arg Glu Ile Ile Ser Ala Ala Glu His Phe Ser Met Ile
Arg Ala Ser Arg Asn Lys Ser Gly Ala Ala Phe Gly Val Ala Pro Ala
                                     90
Leu Pro Gly Gln Val Thr Ile Arg Val Arg Val Pro Tyr Arg Val Val
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110
                                105
            100
Gly Leu Val Val Gly Pro Lys Gly Ala Thr Ile Lys Arg Ile Gln Gln
                            120
Gln Thr Asn Thr Tyr Ile Ile Thr Pro Ser Arg Asp Arg Asp Pro Val
                                            140
                        135
Phe Glu Ile Thr Gly Ala Pro Gly Asn Val Glu Arg Ala Arg Glu Glu
                                        155
Ile Glu Thr His Ile Ala Val Arg Thr Gly Lys Ile Leu Glu Tyr Asn
                                    170
               165
Asn Glu Asn Asp Phe Leu Ala Gly Ser Pro Asp Ala Ala Ile Asp Ser
                                185
Arg Tyr Ser Asp Ala Trp Arg Val His Gln Pro Gly Cys Lys Pro Leu
                                                205
                            200
        195
Ser Thr Phe Arg Gln Asn Ser Leu Gly Cys
                        215
<210> 2243
<211> 384
<212> DNA
<213> Homo sapiens
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gattcatttc ctggtaagaa tcttctgact tattgagctg catgtcagaa gcaaaaagca
aaaaaaccaa atatgtacat aaaacagtgt tatcattcct taaaagagaa ggaaaataaa
tecetaaata atgtggaetg gaacacagaa atecaagget ggeegeaegg gteetggetg
ggatggcatc cggggagctg ctgctgggga cgtgcttgcc ggcacaggtc aggggagccg
ggttctgcct cetecttgce cactetett gegecetece tgtgetegee tgtettgttt
tacctcccat cctgggccct tgga
384
<210> 2244
<211> 108
<212> PRT
<213> Homo sapiens
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Met Gly Gly Lys Thr Arg Gln Ala Ser Thr Gly Arg Ala Gln Arg Glu
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Trp Ala Arg Arg Gln Asn Pro Ala Pro Leu Thr Cys Ala Gly Lys
                                25
His Val Pro Ser Ser Ser Pro Asp Ala Ile Pro Ala Arg Thr Arg
                            40
Ala Ala Ser Leu Gly Phe Leu Cys Ser Ser Pro His Tyr Leu Gly Ile
                        55
Tyr Phe Pro Ser Leu Leu Arg Asn Asp Asn Thr Val Leu Cys Thr Tyr
                                        75
Leu Val Phe Leu Leu Phe Ala Ser Asp Met Gln Leu Asn Lys Ser Glu
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95
                                    90
                85
Asp Ser Tyr Gln Glu Met Asn Pro Gln Ser Phe Ser
                                105
<210> 2245
<211> 632
<212> DNA
<213> Homo sapiens
<400> 2245
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tcgagagaag aggtcggacg cgagaggctc aactatggtc acaccttggc ccacgctatt
gaggcccaca agcatttcac gtggcgtcat ggcgaggctg acgcggtggg catggtgttt
geggeegaac tgtegeaceg gtacetggga etgteegatg aggtegttge gegeaceege
actatectgt etgagategg attgeetgtt acctgtgaeg agattaagtg ggeagatetg
cgcaagacga tgaacgtgga caagaaaacc agggtagacc cgcagaccgg gcgtcaagtg
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geegetttag eegagtgeta egaceggtgt teegeaeggt aaaaaegtte ggaaatgaae
atgtggctgc gggtcagtcg gcattcaggc ctccgtgacg ccgtcgaccc caagtgatgt
gacgattcgg gaaatatctt gttgggcact cttgagcctc gcctgattcc ccatacccga
cttaagttca gtatcgacgg catgaatccg ga
<210> 2246
<211> 153
<212> PRT
<213> Homo sapiens
<400> 2246
Thr Arg Ala Ile Thr Val Lys Ala Gly Val Val Ser Ala Asp Leu His
                                     10
Glu Arg Thr Ser Ser Arg Glu Glu Val Gly Arg Glu Arg Leu Asn Tyr
                                 25
Gly His Thr Leu Ala His Ala Ile Glu Ala His Lys His Phe Thr Trp
                            40
Arg His Gly Glu Ala Asp Ala Val Gly Met Val Phe Ala Ala Glu Leu
Ser His Arg Tyr Leu Gly Leu Ser Asp Glu Val Val Ala Arg Thr Arg
                     70
Thr Ile Leu Ser Glu Ile Gly Leu Pro Val Thr Cys Asp Glu Ile Lys
                                     90
Trp Ala Asp Leu Arg Lys Thr Met Asn Val Asp Lys Lys Thr Arg Val
                                 105
            100
Asp Pro Gln Thr Gly Arg Gln Val Leu Arg Phe Val Gly Ile His Lys
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120
       115
Pro Gly Gln Val Ala Met Ile Val Asp Pro Asp Glu Ala Ala Leu Ala
                       135
Glu Cys Tyr Asp Arg Cys Ser Ala Arg
<210> 2247
<211> 324
<212> DNA
<213> Homo sapiens
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cetettaate ttggeegeac ageacetggg agetttaaat agaececeae geeetgggeg
coccaccgo tgacccacco gatotoagot otgootttoo ogeotototg etgggttgca
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tgtgccgtgt gagccatccc cctg
324
<210> 2248
<211> 105
<212> PRT
<213> Homo sapiens
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Met Ala His Thr Ala His Ser Pro Glu Ala Pro Gly Val Ala Ser Arg
Tyr Ser Arg Gly Trp Glu Ser Leu Ala Tyr Ala Thr Gln Gln Arg Gly
                                25
Gly Lys Gly Arg Ala Glu Ile Gly Trp Val Ser Gly Gly Gly Ala Gln
                            40
Gly Val Gly Val Tyr Leu Lys Leu Pro Gly Ala Val Arg Pro Arg Leu
Arg Gly Thr Ala Pro Asn Cys Pro Gly Asn Ser Asp Cys Thr Arg His
                    70
Ser Pro Arg Pro Thr Ser Leu Leu Pro Leu Gly Arg Leu Ala Ser Ser
Val Gly Glu Asn Pro Gly Gly Glu Arg
            100
<210> 2249
<211> 394
<212> DNA
<213> Homo sapiens
<400> 2249
gaaaaccgga taacagggtg tatacaagcc tctgagttct gggagcaaca accagctcaa
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cccgcaaggg aaagtgagaa agcaattaag ttgggaaccg cggggttttc ccattcccac
ggtggaaacc gcggccagtg aattgaaatc cgcttcctta aggcgaaatg ggcccttaaa
aggcaaggtc aaccgcccgc cagtgtgatg gaatttgcaa gaattcggtt tagcaccctc
ccggcttttc tcccgaccgc gtgcagggtg ggctgcgctg ggcctgggag gaactgggag
ctgggggctc atgtcctgta taaaggggct gcagggggcgc tgtctccccc cagaagactg
gccacatggg gacaggcctc ctgggggcag atct
<210> 2250
<211> 104
<212> PRT
<213> Homo sapiens
<400> 2250
Met Ser Pro Gln Leu Pro Val Pro Pro Arg Pro Ser Ala Ala His Pro
Ala Arg Gly Arg Glu Lys Ser Arg Glu Gly Ala Lys Pro Asn Ser Cys
Lys Phe His His Thr Gly Gly Arg Leu Thr Leu Pro Phe Lys Gly Pro
Phe Arg Leu Lys Glu Ala Asp Phe Asn Ser Leu Ala Ala Val Ser Thr
Val Gly Met Gly Lys Pro Arg Gly Ser Gln Leu Asn Cys Phe Leu Thr
Phe Pro Cys Gly Leu Ser Trp Leu Leu Leu Pro Glu Leu Arg Gly Leu
                                  90
                                                      95
Tyr Thr Pro Cys Tyr Pro Val Phe
           100
<210> 2251
<211> 654
<212> DNA
<213> Homo sapiens
<400> 2251
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gtggaatagt caggttaaat ttaatgtgac cgtttatcgc aatctgccga ccactcgcga
ttcaatcatg acttcgtgat aaaagattga gtgtgaggtt ataacgccga agcggtaaaa
agtttaatca tgtttcagac ttttatttct cgccataatt caaacttttt ttctgataag
ctggttctca cttctgttac tccagcttct tcggcacctg ttttacagac acctaaagct
acategicaa egitatatit igatagittg aeggitaatg etggiaatgg iggittiett
420
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cattgcattc agatggatac atctgtcaac gccgctaatc aggttgtttc tgttggtgct
gatattgett ttgatgeega ecetaaattt tttgeetgtt tggttegett tgagtettet
teggtteega etacceteee gaetgeetat gatgtttate etttggatgg tegecatgat
ggtggttatt ataccgtcaa ggactgtgtg actattgacg tectteeteg tacg
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Met Phe Gln Thr Phe Ile Ser Arg His Asn Ser Asn Phe Phe Ser Asp
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Lys Leu Val Leu Thr Ser Val Thr Pro Ala Ser Ser Ala Pro Val Leu
Gln Thr Pro Lys Ala Thr Ser Ser Thr Leu Tyr Phe Asp Ser Leu Thr
Val Asn Ala Gly Asn Gly Gly Phe Leu His Cys Ile Gln Met Asp Thr
                        55
Ser Val Asn Ala Ala Asn Gln Val Val Ser Val Gly Ala Asp Ile Ala
Phe Asp Ala Asp Pro Lys Phe Phe Ala Cys Leu Val Arg Phe Glu Ser
                                     90
Ser Ser Val Pro Thr Thr Leu Pro Thr Ala Tyr Asp Val Tyr Pro Leu
                                 105
Asp Gly Arg His Asp Gly Gly Tyr Tyr Thr Val Lys Asp Cys Val Thr
                                                 125
        115
Ile Asp Val Leu Pro Arg Thr
                         135
    130
<210> 2253
 <211> 327
 <212> DNA
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cactgagcac cagcaagcag gcccgcctgg attgcccacc gggtcacgaa aacgatgaaa
teggegtatt ggtcaacgtc gccaaccagc aattcgacaa tatggaaacc gaaatcgagc
 agegeegeca egeegaggae egeeteaceg aatacetggg ecaactggaa gatategtet
 cegcacgcac cetggagete aaggecagea accaacgett gagecaatee aacgatgage
 tggaagcggc aaagttgacc gccttgg
 327
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<210> 2254

<211> 100 <212> PRT <213> Homo sapiens <400> 2254 Met Leu Thr Gln Pro Leu Val Arg Ile Ile Arg Ala Leu Ser Thr Ser Lys Gln Ala Arg Leu Asp Cys Pro Pro Gly His Glu Asn Asp Glu Ile Gly Val Leu Val Asn Val Ala Asn Gln Gln Phe Asp Asn Met Glu Thr Glu Ile Glu Gln Arg Arg His Ala Glu Asp Arg Leu Thr Glu Tyr Leu 55 Gly Gln Leu Glu Asp Ile Val Ser Ala Arg Thr Leu Glu Leu Lys Ala 70 75 Ser Asn Gln Arg Leu Ser Gln Ser Asn Asp Glu Leu Glu Ala Ala Lys 90 Leu Thr Ala Leu 100 <210> 2255 <211> 357 <212> DNA <213> Homo sapiens <400>,2255 nngctagcac atgagaagtg tgaagtttat actttgcttg ggcgatcacg ccgttttcca aatatggctc atgcaacttc tggccaaagg ggtcacattg agcgtgctgc tatcaatgct cctgtacagg gcagtgcagc tgatgttgct atgtgtgcaa tgcttgagat agacaggaat actcgtctta aggagettgg ttggaegeta etettgeagg tgeatgatga agtgataetg gaagggcctt cagagtctgc ggagtnggcc aagtccatag ttgttgagtg catgtctaag cccttctatg gcaccaatat cctgagggtc gaccttgctg ttgatgccaa gtgtgca <210> 2256 <211> 119 <212> PRT <213> Homo sapiens <400> 2256 Xaa Leu Ala His Glu Lys Cys Glu Val Tyr Thr Leu Leu Gly Arg Ser 10 Arg Arg Phe Pro Asn Met Ala His Ala Thr Ser Gly Gln Arg Gly His Ile Glu Arg Ala Ala Ile Asn Ala Pro Val Gln Gly Ser Ala Ala Asp Val Ala Met Cys Ala Met Leu Glu Ile Asp Arg Asn Thr Arg Leu Lys Glu Leu Gly Trp Thr Leu Leu Leu Gln Val His Asp Glu Val Ile Leu

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75
                    70
65
Glu Gly Pro Ser Glu Ser Ala Glu Xaa Ala Lys Ser Ile Val Val Glu
Cys Met Ser Lys Pro Phe Tyr Gly Thr Asn Ile Leu Arg Val Asp Leu
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Ala Val Asp Ala Lys Cys Ala
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<210> 2257
<211> 626
<212> DNA
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120
gtatatctac atgaagaatt acagcaggac atgcaaaagt ttaagaatga ggtcaacaca
ttagaagaag agttcctggc tttgaagaaa gaaaatgttc aacttcataa agaggttgaa
gaagaaatgg agaagcacag aagtaatagc acagaattat caggaaccct aactgatggt
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gagcatgaca ggcctgcaga taaaacagct aatgaaaaga acaaggtcaa aaaccaaata
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gaattgtctc actctgttta tgagaatttt atgttgctga ttgaacaact tagaatggag
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gtatacattg ctgagaactg acgcgt
626 '
<210> 2258
<211> 187
<212> PRT
<213> Homo sapiens
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Xaa Met Thr Lys Asn Met Asn Gln Asn Ser Asp Ser Gly Ser Thr Asn
Asn Tyr Lys Ser Leu Lys Pro Lys Leu Glu Asn Leu Ser Ser Leu Pro
Pro Asp Ser Asp Arg Thr Ser Glu Val Tyr Leu His Glu Glu Leu Gln
Gln Asp Met Gln Lys Phe Lys Asn Glu Val Asn Thr Leu Glu Glu
Phe Leu Ala Leu Lys Lys Glu Asn Val Gln Leu His Lys Glu Val Glu
                    70
Glu Glu Met Glu Lys His Arg Ser Asn Ser Thr Glu Leu Ser Gly Thr
```

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85
                                    90
Leu Thr Asp Gly Thr Thr Val Gly Asn Asp Asp Asp Gly Leu Asn Gln
                                105
            100
Gln Ile Pro Arg Lys Glu Asn Glu Glu His Asp Arg Pro Ala Asp Lys
                            120
Thr Ala Asn Glu Lys Asn Lys Val Lys Asn Gln Ile Tyr Pro Glu Ala
                        135
                                            140
Asp Phe Ala Asp Ser Met Glu Pro Ser Glu Ile Ala Ser Glu Asp Cys
                                        155
Glu Leu Ser His Ser Val Tyr Glu Asn Phe Met Leu Leu Ile Glu Gln
                165
                                    170
Leu Arg Met Glu Tyr Lys Gly Arg Thr Thr Ala
                                185
            180
<210> 2259
<211> 425
<212> DNA
<213> Homo sapiens
<400> 2259
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acggtcatct acgactgtaa cacgacagcc aataaacaat agcaaatcag taatagctcg
gctaacatga cctgcaccta atacgagaac tgacggatca ttttctacag gttgtacgaa
acactccatt tegectacea tgeatagaga atteagettt getttateta eagtaaatee
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catga
425
<210> 2260
<211> 141
<212> PRT
<213> Homo sapiens
<400> 2260
Met Lys Asn Arg Leu Gln Val Thr Glu Ala Thr Val Met Val Thr Val
Leu Ser Gly Pro Arg Gln Gly Asp Lys Thr Ile Tyr Ala Glu Asp Gly
Arg Val Leu Tyr Gly Thr Pro Ile Glu Gly Phe Thr Val Asp Lys Ala
Lys Leu Asn Ser Leu Cys Met Val Gly Glu Met Glu Cys Phe Val Gln
                        55
Pro Val Glu Asn Asp Pro Ser Val Leu Val Leu Gly Ala Gly His Val
Ser Arg Ala Ile Thr Asp Leu Leu Phe Ile Gly Cys Arg Val Thr
```

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85
Val Val Asp Asp Arg Pro Glu Tyr Val Val Pro Glu Phe Phe Asp Glu
                                105
            100
Arg Val Thr Arg Lys Cys Leu Pro Leu Glu Asn Phe Lys Asn Asp Leu
                            120
Pro Leu Asp Glu Tyr Asn Gly Phe Ile Ile Val Thr Arg
                        135
    130
<210> 2261
<211> 660
<212> DNA
<213> Homo sapiens
<400> 2261
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agetegatge egtggeegee atgatggeee ttgtetatgg gtegaatgtg actatteeeg
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420
geogteatee egeogatgtt catggtgggg geggteeett ttgeeettea gatggttgee
480
gtcatgctgg cgccgatggt gctgggaagt atccgtggcg gatgcgcggt aggcttgtat
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660
<210> 2262
<211> 139
<212> PRT
<213> Homo sapiens
<400> 2262
Met Pro Gly Gly Ser Ser Thr Ser Phe Thr Glu Arg Cys Ser Ile Gly
Pro Asn Gly Cys Pro Cys Gly Gln Pro Leu Tyr Leu Val Met Gly Arg
                                25
Asn Pro Met Ser Ser Arg Asn Gly Phe Gln Ala Thr Asp Leu Ala Leu
Ile Ala Val Phe Ala Ala Leu Ile Ala Val Leu Ala Val Ile Pro Pro
                        55
Met Phe Met Val Gly Ala Val Pro Phe Ala Leu Gln Met Val Ala Val
                                         75
                    70
Met Leu Ala Pro Met Val Leu Gly Ser Ile Arg Gly Gly Cys Ala Val
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85
                                    90
Gly Leu Tyr Ile Leu Val Gly Ala Leu Gly Leu Pro Val Phe Ser Gly
                                105
            100
Gly Ser Ser Gly Ile Gly Val Leu Val Gly Pro Thr Gly Gly Tyr Leu
                            120
                                                 125
Trp Gly Trp Leu Ile Gly Ala Phe Val Ala Gly
                        135
<210> 2263
<211> 491
<212> DNA
<213> Homo sapiens
<400> 2263
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teccacegeg gtatggetgg gteactgetg acagatggeg tecceetget gatettteeg
gagggcaccc ggtctcgcac cggcgcaatg ggcaccttca aacctggggc tgccgcattg
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ggacgccacc gcgcgctaag ccaggcctcc gagagcggcg acaccgcatc caccaaccac
tcgacgtgca c
491
<210> 2264
<211> 163
<212> PRT
<213> Homo sapiens
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Xaa Ala Phe Pro Val Asp Arg Gly Lys Gly Lys Ser Lys Gln Gly Ala
Arg Ser Pro Arg Ser His Arg Gly Met Ala Gly Ser Leu Leu Thr Asp
                                25
Gly Val Pro Leu Leu Ile Phe Pro Glu Gly Thr Arg Ser Arg Thr Gly
                            40
Ala Met Gly Thr Phe Lys Pro Gly Ala Ala Ala Leu Ala Ile Ser Arg
Gly Val Pro Val Ile Pro Ile Ala Leu Val Gly Ala Trp Ala Ala Met
                    70
Pro Ser Glu Gln Ala Arg Leu Pro Lys Gly Arg Pro Leu Val His Val
                                    90
Ala Ile Gly His Pro Met Asp Pro Val Pro Gly Glu Ile Ala His Gln
                                105
Phe Ser Glu Arg Ile Arg Arg Gln Val Ile Glu Leu His Asp Gln Thr
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120
        115
Ala Arg Ala Tyr Gly Met Pro Thr Leu Asp Glu Tyr Gly Arg His Arg
                        135
Ala Leu Ser Gln Ala Ser Glu Ser Gly Asp Thr Ala Ser Thr Asn His
                                        155
                    150
Ser Thr Cys
<210> 2265
<211> 328
<212> DNA
<213> Homo sapiens
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cataccaccc gagaggagga gagggtggtg ggagaaatca gatcagagtt caaaatgcac
cggaaggget cggaaatgta agactgcacc ttgcaggaac tgtcaatgcc actaccaata
teacteactt aegteaagea ettgagagea getgegaaca caattetetg aeteetaace
tttagcacgt gactgggacc actggaca
328
<210> 2266
<211> 100
<212> PRT
<213> Homo sapiens
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Met Gly Ile Gly Gln His Gly Trp Ile Tyr Cys Ile Thr Cys Leu Pro
Ser Gly Lys Ser Gln His Gly Arg His Met Leu Ala Glu Thr Leu Leu
Glu Leu Pro Leu Ser Ile Asp Ala Tyr His Pro Arg Gly Gly Glu Gly
Gly Gly Arg Asn Gln Ile Arg Val Gln Asn Ala Pro Glu Gly Leu Gly
                         55
Asn Val Arg Leu His Leu Ala Gly Thr Val Asn Ala Thr Thr Asn Ile
                                         75
                     70
Thr His Leu Arg Gln Ala Leu Glu Ser Ser Cys Glu His Asn Ser Leu
 Thr Pro Asn Leu
             100
 <210> 2267
 <211> 370
 <212> DNA
 <213> Homo sapiens
 <400> 2267
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cgagggagcc accactgaat tgcactctcg ctggggagtt aagccatatc cccctaagac
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gacagagatg gtgaagcagg catgtcctaa agcctccctt cttaaccctg accttgaagg
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370
<210> 2268
<211> 91
<212> PRT
<213> Homo sapiens
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Asn Leu Tyr Arg Asp Arg Leu Lys Ala Thr Ala Thr Gln Gly Thr Glu
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Ile Gly Val Asn Ala Gly Ser Leu Asp Lys Arg Leu Leu Asp Lys Tyr
Gly Ala Pro Thr Ala Glu Ala Met Val Glu Ser Ala Leu Trp Glu Ala
Ser Leu Phe Glu Gln Tyr Gly Phe Arg Asp Phe Lys Ile Ser Val Lys
His His Asp Pro Val Val Met Ile Arg Ala Tyr Glu Gln Leu Ala Ala
Lys Cys Asp Tyr Pro Leu His Leu Gly Val Thr Glu Ala Gly Pro Ala
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Phe Gln Gly Thr Ile Lys Ser Ala Val Ala Phe Gly His Leu Leu Ala
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Glu Gly Ile Gly Asp Thr Ile Arg Val Ser Leu Ser Ala Asp Pro Val
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Glu Glu Val Lys Val Gly Ile Lys Ile Leu Glu Ser Leu Asn Leu Arg
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Pro Arg Gly Leu Glu Ile Val Ser Cys
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<211> 191
<212> PRT
<213> Homo sapiens
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Asp Ala Val Ala Arg Leu Ala Thr Tyr Ser Ala Arg Leu Ala Asp His
Gln Gly Arg Val Ser Ala Arg Ile Gly Asp Leu Phe Gln Leu Val Ser
                    70
                                        75
Glu Ala Asp Phe Ile Arg His Leu Ala Gly Asp Glu Met Thr Asp Ala
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Gly His Ile Glu Arg Ala Leu Lys Ala Lys Ala Thr Arg Thr Gly Arg
Val Ser Ala Arg Ile Leu Asp Asp Met Leu Ala Gly Val Ile Leu Ile
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                                                125
Asp Thr Ala Gly Ala Ala Val Gly Lys Cys Asn Gly Leu Thr Val Leu
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                                            140
Glu Val Gly Asp Ser Ala Phe Gly Val Pro Ala Arg Ile Ser Ala Thr
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Val Tyr Pro Gly Gly Ser Gly Ile Val Asp Ile Glu Arg Glu Val Asn
Leu Gly Gln Pro Ile His Ser Lys Gly Val Met Ile Leu Thr Gly
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300
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	aggagagttc	tttcgccact	caggecetge	ggaaacctca	cctctatgaa
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Gln Arg Ser Cys Arg Gly Gly Leu Ser Leu Glu Arg Leu Pro Asn Ser
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Ile Ala Ser Arg Phe Arg Leu Thr Glu Arg Glu Glu Val Ile Thr
Cys Phe Glu Arg Ala Ser Trp Ile Ala Gln Val Phe Leu Gln Glu Leu
                       55
Glu Lys Thr Thr Asn Asn Ser Thr Ser Arg His Leu Lys Gly Cys His
                                       75
Pro Leu Asp Tyr Glu Leu Thr Tyr Phe Leu Glu Ala Ala Leu Gln Ser
                                   90
Ala Tyr Val Lys Asn Leu Lys Lys Gly Asn Ile Val Lys Gly Met Arg
                               105
Glu Leu Arg Glu Val Leu Arg Thr Val Glu Thr Lys Ala Thr Gln Asn
                           120
Phe Lys Val Met Ala Ala Lys His Leu Ala Gly Val Leu Leu His Ser
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Leu Ser Gly Val Leu Leu Glu Pro Pro Val Pro Pro Ser Ala
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240
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<212> PRT
<213> Homo sapiens
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Gly Cys Ala Pro Thr Phe Phe Pro Asn Gln Ser Ser Gly Phe Thr Thr
Pro Thr Ala Met Thr Pro Pro Val Leu Thr Thr Ala Glu Thr Ser Val
                            40
Lys Pro Ser Val Ser Ala Phe Thr His Ser Pro Pro Glu Asn Thr Thr
Gly Ile Ser Ser Thr Ile Ser Phe His Ser Arg Thr Leu Asn Leu Thr
Asp Val Ile Glu Glu Leu Ala Gln Ala Ser Thr Gln Thr Leu Lys Ser
Thr Ile Ala Ser Glu Thr Thr Leu Ser Ser Lys Ser His Gln Ser Thr
            100
                                105
                                                     110
Thr Thr Arg Lys Ala Ile Ile Arg His Ser Thr Ile Pro Pro Phe Leu
                            120
                                                 125
Ser Ser Ser Ala Thr Leu Ile Pro Val Pro Ile Ser Pro Pro Phe Thr
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140
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Gln Arg Ala Val Thr Asp Asn Val Ala Thr Pro Ile Ser Gly Leu Met
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                                        155
Thr Asn Thr Val Val Lys Leu
                165
<210> 2277
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<213> Homo sapiens
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Gly Arg Ser Ser Pro Gly Thr Ala Gln Pro Gly Pro Xaa Thr Lys Ser
                                25
Cys Cys Pro Pro Trp Leu Ser Ser Pro Pro Ala Ala Cys Leu Pro Ser
                            40
Ser Leu Leu Ser Pro Tyr Pro Val Leu Pro Ser Pro Ser Cys Lys Val
His Ala Thr Pro Gln Glu Glu Pro Gln Arg Leu Ser Ser Asp Pro Thr
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Leu Ser Ala Pro Thr Leu Pro Pro His Gln Ile Leu Ser Thr Pro
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                85
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Glu Cys Met Glu Ser Glu Gly Thr Gly Pro Thr His Ser Pro Ser Ser
Pro Ala Val Leu Phe Ser Phe Leu His Cys Ala Phe Val Ser Phe Leu
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Gly Thr Ser Phe Thr Pro Ala Cys Ile Ser Ser Leu Ser His Gly Ser
                                                             80
                    70
65
Pro Leu Ser Trp Ser Ser Gly Ala Val Pro Ile
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300
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Pro Thr Gln Leu Ile Met Lys Pro Gly Ser Glu Trp Asp Gly Ser Thr
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Pro Ser Glu Asp Ser Arg Gly Thr Phe Val Pro Asp Ile Leu His Gly
                                                45
Asn Phe Gln Glu Gly Gly Gln Leu Ala Ser Ala Ala Pro Asp Leu Trp
                        55
Ile Asp Ala Lys Lys Pro Phe Ser Leu Lys Ala Asp Gly Glu Asn Pro
Asp Ile Leu Thr His Cys Glu His Asp Tyr Gly Glu Thr Thr Arg
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His Leu Leu Val Val Phe Phe Leu Val Gly Ala Val Pro Thr Ile Ser
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Ile Val His Pro Val Arg Val Asp Ala Gly Gly Ser Phe Leu Ser Tyr
Glu Leu Trp Pro Arg Ala Leu Arg Lys Arg Asp Val Ser Val Arg Arg
Asp Ala Pro Ala Phe Tyr Glu Leu Gln Tyr Arg Gly Arg Glu Leu Arg
Phe Asn Leu Thr Ala Asn Gln His Leu Leu Ala Pro Gly Phe Val Ser
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                                105
Glu Thr Arg Arg Arg Gly Gly Leu Gly Arg Ala His Ile Arg Ala His
                                                 125
Thr Pro Ala Cys His Leu Leu Gly Glu Val Gln Asp Pro Glu Leu Glu
Gly Gly Leu Ala Ala Ile Ser Ala Cys Asp Gly Leu Lys Gly Val Phe
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Gln Leu Ser Asn Glu Asp Tyr Phe Ile Glu Pro Leu Asp Ser Ala Pro
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Ala Arg Pro Gly His Ala Gln Pro His Val Val Tyr Lys Arg Gln Ala
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Pro Glu Arg Leu Ala Gln Arg Gly Asp Ser Ser Ala Pro Ser Thr Cys
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225					230					235			•		240
Val	Ser	Lys	Glu		Trp	Val	Glu	Thr		Val	Val	Ala	Asp		Lys
			_	245		~-	_	~1	250	<b>~1</b>		m	1	255	m\
Met	Val	Glu	Tyr	His	GIY	GIn	Pro	265	vaı	GIU	ser	Tyr	270	Leu	Inr
T] _	Mot	7.55	260 Met	17-1	712	Gly	Leu		Wie	) en	Pro	Ser		Glv	Δen
ile	Mec	275	Mec	val	AId	GIY	280	FILE	птэ	АЗЪ	110	285	116	GLY	na
Pro	Tle		Ile	Thr	Ile	Val		Leu	Val	Leu	Leu		Asp	Glu	Glu
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Cys	Lys	Trp	Gln	Lys	Ser	Ile	Asn	Met	Lys	Gly	Asp	Ala	His		Leu
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His	His	Asp	Thr	Ala	Ile	Leu	Leu		Arg	Lys	Asp	Leu		Ala	Ala
	•	<b>-</b>	340	~	<b>a</b> 1	m\	7	345	T	C 0 20	tti a	3701	350	C11.	Mor
Met	Asn	355	Pro	Cys	GIU	Int	360	GTÅ	Leu	Ser	nis	365	ALA	Gry	Mec
Cve	Gln		His	Ara	Ser	Cvs		Tle	Asn	Glu	Asp		Glv	Leu	Pro
Cys	370	110	1113	A-9	JC1	375	001	110			380		1		
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Ile	Met	Ser	Pro	Gln	Leu	Leu	Tyr		Ala	Ala	Pro	Leu		Trp	Ser
_		_	420		_			425		•	•	•	430	m	a1
Arg	Cys		Arg	Gin	Tyr	He	1nr 440	Arg	Pne	Leu	Asp	445	GIY	Trp	GIY
LOU	Cvc	435	Asp	Acn	Dro	Dro		Lve	Δen	Tle	Tle		Phe	Pro	Ser
Leu	450	Leu	vaħ	ASP	<i>F</i> 10	455	nia	בעם	vab	110	460				001
Val		Pro	Gly	Val	Leu		Asp	Val	Ser	His	Gln	Cys	Arg	Leu	Gln
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Tyr	Gly	Ala	Tyr	Ser	Ala	Phe	Cys	Glu	Asp	Met	Asp	Asn	Val	Cys	His
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Thr	Leu	Trp	Cys	Ser	Val	Gly	Thr		Cys	His	Ser	Lys		Asp	Ala
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Ser		Trp	Ser	Ala	Trp		Ile	Cys	Ser	Arg		Cys	Gly	Met	Gly
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	Gln	Ser	Ala	Glu	Arg	Gln	Cys	Thr	Gln	Pro	Thr	Pro	Lys	Tyr	Lys
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Gly	Arg	Tyr	Cys	Val	Gly	Glu	Arg	Lys	Arg	Phe	Arg	Leu		Asn	Leu
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Gln	Ala		Pro	Ala	Gly	Arg		Ser	Phe	Arg	His		GIn	cys	ser
***	DI	595	<b>π1</b> -	Mar	T	(T)	600	C1	C1-	T 011	u:~	605	Trn	Va1	Dro
HIS		Asp	Ala	Mec	Leu	1yr 615	ьys	gry	GIII	neu	620	TIIT	тър	VQI	
Va 1	610 Val	Acn	Asp	۷a۱	Aen		Cve	Glu	Leu	His		Ara	Pro	Ala	Asn
							-1-				- , -				

625					630					635					640
Glu	Tyr	Phe	Ala	Lys	Lys	Leu	Arg	Asp	Ala	Val	Val	Asp	Gly	Thr	Pro
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•		675	_	•	_		680					685			
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Δla	Δla	Asn	Phe		Ala	Leu	Ara	Ser		Asp	Pro	Glu	Lys	Tyr	Phe
nıu	7.14		740				5	745					750	•	
Len	λen	Glv		Trn	Thr	Tle	Gln		Asn	Glv	Asp	Tvr	Gln	Val	Ala
Deu	ASII	755	Gry	111	1111	110	760			,		765			
C1	The		Dhe	Thr	ጥህን	Δla		Δrσ	Glv	Asn	Trn		Asn	Leu	Thr
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C 0 T		C1	Dro	Thr	Lvc	_	Dro	Va 1	Trn	Tle		Val	Pro	Ala	Ser
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785	<b>~1</b>	D	C1	~1		602	7 ~~	C117	Clv		Dro	Ara	Pro	Ser	
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	•••	<b>01</b>	<b>.</b>	805	N	Dwa	~1	~1		C0.~	Dro	G1 v	Ser	-	Thr
Leu	HIS	GIA		ser	Arg	PIO	GIA		vai	261	FIU	Gry	830	Val	1 ***
	_		820	~1	<b>.</b>	<b>a</b> 1	D	825	71_	21-	7 l a	C~~		Sar	val.
GIu	Pro	_	ser	GIU	Pro	GIY		Pro	ATA	ALA	ALA	845	Thr	Ser	vai
_	_	835	_	_		•	840	•	17-1	21-	7 l a		uic	7 ~~	Clu
Ser		Ser	Leu	Lys	Trp		Asn	Leu	vaı	ALA		vai	His	Arg	GIY
	850				_	855	<b>~1</b>	•	<b>~1</b>	~1	860	7	7	uio	T 011
	Trp	Gly	Gln	Ala		Leu	GIY	Leu	GIA		Trp	Arg	Arg	HIS	
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Val	Gly	Leu	Asp	Glu	Gln	Ser	Ala	Leu	Glu	Pro	Pro	Ala	Cys	Glu	His
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Leu			Pro	Pro	Thr	Glu	Thr	Pro	Cys	Asn	Arg	His	Val	Pro	Cys
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Glv	Glu	Glv	Thr			Aro	Asn	Val			Thr	Asn	Asp		
1		1			3	3				4			-		-

	1000					1065					1070	ı	
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Val Pro Cys		GIu	Ala		GIN 1080		Ala	ser	GIU	1085	1111	Cys	DCI
Leu Pro Leu	5	7	Т~~				Thr	T.eu	Glv			Glv	Ser
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1090 Gly Ser Gly						T 033	Dha	λen			Δsp	Phe	Tle
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1105	_		1110		D	C	Dwa			Sar	Dro	Lve	
Pro His His	Leu			Arg	Pro	ser			Ser	Ser	FIU	1135	
		1125			<b>~1</b>	<b>~1</b>	1130		Dro	Clu	Lan		
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	1140			_		1145		CC	n an	Time			Tle
Pro Gly Pro		Pne	vaı	Asp			IYL	IYI	ASP	1165		1110	110
11		_	_	_	1160		D	C	~1.,			) en	T.em
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1170				1175	•	m\	D	Dwo			cor	uic	Pro
Asp Leu Al	a Gly	Thr	GIY	Asp	Arg	Inr	PIO	1195	PIO	nis	Jer	1110	1200
1185	_	_,	1190		D	11-1	D			Clu	Bro	Dro	
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Gly Lys As Asn Glu Va 13 His Leu Pr 1330 Gly Ser Th	p Ser 130 1 Phe 15 0 Pro	1289 Gln O Lys Arg	Ser Asp Pro Ser	Gln Asp Ser 133	Leu Glu 132 Ser	Pro 130: Glu Thr	129 Pro Pro Leu	Pro Lys Pro Val	Trp Gly Pro 134 Ala	Arg Arg 132: Leu 0	Asp 131 Gly 5 Ser	1299 Arg 0 Ala Pro	Thr Pro Val Thr
Gly Lys As Asn Glu Va 13 His Leu Pr 1330 Gly Ser Th	p Ser 130 1 Phe 15 o Pro	1289 Gln O Lys Arg	Ser Asp Pro Ser 1350	Gln Asp Ser 133	Leu Glu 1320 Ser Ser	Pro 1309 Glu Thr	Pro Pro Leu Asp	Pro Lys Pro Val	Trp Gly Pro 134 Ala 5	Arg Arg 1325 Leu 0 Glu	Asp 131 Gly Ser Leu	1299 Arg O Ala Pro	Thr Pro Val Thr 1360
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Gly Lys As  Asn Glu Va  13  His Leu Pr 1330  Gly Ser Th 1345  Gly Gly Th  Val Asp Se  Pro Pro Il 13  Glu Pro Gl 1410  Leu Gln Th 1425	p Ser 130 l Phe 15 o Pro r His r Val r Glu 138 e Ala 95 y Thr	128: Gln O Lys Arg Ser Ala 136 Leu O Pro	Ser Asp Pro Ser 1356 Trp Trp Leu Ser Val 143	Gln Asp Ser 133 Pro Glu Pro Pro Phe 141 Trp	Leu Glu 1320 Ser Ser Pro Thr Glu 140 Pro 5	Pro 130: Glu Thr Pro Ala Val 138 Met 0 Ala	Pro Leu Asp Leu 137 Gly Lys Pro	Pro Lys Pro Val 135 Glu Val Val Gly Leu 143	Trp Gly Pro 134 Ala 5 Gly Ala Arg Pro 142 Pro 5	Arg 1329 Leu 0 Glu Gly Ser Asp 140 Gly 0 Thr	Asp 131c Gly 5 Ser Leu Leu 139 Ser 5 Ser	Arg Arg Ala Pro Trp Gly 137 Leu Ser Trp	Thr Pro Val Thr 1360 Pro Pro Leu Asp Thr 1440
Gly Lys As  Asn Glu Va  13  His Leu Pr  1330  Gly Ser Th  1345  Gly Gly Th  Val Asp Se  Pro Pro Il  13  Glu Pro Gl  1410  Leu Gln Th	p Ser 130 l Phe 15 o Pro r His r Val r Glu 138 e Ala 95 y Thr	128: Gln O Lys Arg Ser Ala 136 Leu O Pro Ala Met	Ser Asp Pro Ser 1350 Trp Trp Leu Ser Val 143 Pro	Gln Asp Ser 133 Pro Glu Pro Pro Phe 141 Trp	Leu Glu 1320 Ser Ser Pro Thr Glu 140 Pro 5	Pro 130: Glu Thr Pro Ala Val 138 Met 0 Ala	1290 Pro 5 Pro Leu Asp Leu 137 Gly 5 Lys Pro Phe	Pro Lys Pro Val 135 Glu Val Val Leu 143 Asn	Trp Gly Pro 134 Ala 5 Gly Ala Arg Pro 142 Pro 5	Arg 1329 Leu 0 Glu Gly Ser Asp 140 Gly 0 Thr	Asp 131c Gly 5 Ser Leu Leu 139 Ser 5 Ser	Arg Arg Ala Pro Trp Gly 137 Leu Trp Leu Lys	Thr Pro Val Thr 1360 Pro Leu Asp Thr 1440 Gly
Gly Lys As  Asn Glu Va  13  His Leu Pr  1330  Gly Ser Th  1345  Gly Gly Th  Val Asp Se  Pro Pro Il  Glu Pro Gl  1410  Leu Gln Th  1425  Gly Leu Gl	p Ser 130 1 Phe 15 0 Pro r His r Val 138 e Ala 95 y Thr r Val	128: Gln O Lys Arg Ser Ala 136 Leu O Pro Ala Met	Ser Asp Pro Ser 1350 Trp Trp Leu Ser Val 143 Pro 5	Gln Asp Ser 1339 Pro Glu Pro Pro Phe 141 Trp Glu Glu	Leu Glu 1320 Ser Ser Pro Thr Glu 140 Pro Gly Pro	Pro 1309 Glu Thr Pro Ala Val 138 Met O Ala Thr	Pro Leu Asp Leu 137 Gly Lys Pro Phe Leu 145	Pro Lys Pro Val 135 Glu Val Val Gly Leu 143 Asn	Trp Gly Pro 134 Ala 5 Gly Ala Arg Pro 142 Pro 5	Arg 1329 Leu 0 Glu Gly Ser Asp 140 Gly 0 Thr	Asp 131c Gly Ser Leu Leu 139 Ser Ser Thr	Arg Arg Ala Pro Trp Gly 137 Leu Control Trp Leu Lys 145	Thr Pro Val Thr 1360 Pro Leu Asp Thr 1440 Gly 5
Gly Lys As  Asn Glu Va  13  His Leu Pr 1330  Gly Ser Th 1345  Gly Gly Th  Val Asp Se  Pro Pro Il 13  Glu Pro Gl 1410  Leu Gln Th 1425	p Ser 130 l Phe 15 o Pro r His r Val r Glu 138 e Ala 95 y Thr r Val y His	128: Gln O Lys Arg Ser Ala 136 Leu O Pro Ala : Met 144 Leu	Ser Asp Pro Ser 1350 Trp Trp Leu Ser Val 143 Pro 5	Gln Asp Ser 1339 Pro Glu Pro Pro Phe 141 Trp Glu Glu	Leu Glu 1320 Ser Ser Pro Thr Glu 140 Pro Gly Pro	Pro 130: Glu Thr Pro Ala Val 138 Met O Ala Thr Ala	1290 Pro Fro Leu Asp Leu 137 Gly Lys Pro Phe Leu 145 Pro	Pro Lys Pro Val 135 Glu Val Val Gly Leu 143 Asn	Trp Gly Pro 134 Ala 5 Gly Ala Arg Pro 142 Pro 5	Arg 1329 Leu 0 Glu Gly Ser Asp 140 Gly 0 Thr	Asp 131 Gly Ser Leu Leu 139 Ser Ser Thr	Arg Arg Ala Pro Trp Gly 137 Leu Ser Trp Leu Lys 145	Thr Pro Val Thr 1360 Pro Leu Asp Thr 1440 Gly 5
Gly Lys As  Asn Glu Va  13  His Leu Pr  1330  Gly Ser Th  1345  Gly Gly Th  Val Asp Se  Pro Pro II  Glu Pro Gl  1410  Leu Gln Tr  1425  Gly Leu Gl  Gln Pro Gl	p Ser 130 1 Phe 15 0 Pro r His r Val r Glu 138 e Ala 95 y Thr r Val y His u Ser 146	128: Gln O Lys Arg Ser Ala 136 Leu O Pro Ala Met 144 Leu	Ser Asp Pro Ser 1350 Trp Trp Leu Ser Val 143 Pro 5	Gln Asp Ser 1333 Pro Glu Pro Pro Phe 141 Trp Glu Pro	Glu 1320 Ser 5 Ser Pro Thr Glu 140 Pro Gly Pro Glu	Pro 130: Glu Thr Pro Ala Val 138 Met O Ala Thr Ala Val	Pro Leu Asp Leu 137 Gly Lys Pro Phe Leu 145 Pro 5	Pro Lys Pro Val 135 Glu Val Val Leu 143 Asn 0	Trp Gly Pro 134 Ala 5 Gly Ala Arg Pro 142 Pro 5 Pro	Arg 1329 Leu 0 Glu Gly Ser Asp 140 Gly 0 Thr	Asp 131 Gly Ser Leu Leu 139 Ser Thr Pro	Arg Arg Ala Pro Trp Gly 137 Leu Ser Trp Leu Lys 145 Leu 0	Thr Pro Val Thr 1360 Pro Pro Leu Asp Thr 1440 Gly 5 Leu
Gly Lys As  Asn Glu Va  13  His Leu Pr 1330  Gly Ser Th 1345  Gly Gly Th  Val Asp Se  Pro Pro Il 13  Glu Pro Gl 1410  Leu Gln Tr 1425  Gly Leu Gl  Gln Pro Gl  Ser Thr Pr	p Ser 130 l Phe 15 o Pro r His r Val r Glu 138 e Ala 95 y Thr r Val y His u Ser 146 o Ala	128: Gln O Lys Arg Ser Ala 136 Leu O Pro Ala Met 144 Leu	Ser Asp Pro Ser 1350 Trp Trp Leu Ser Val 143 Pro 5	Gln Asp Ser 1333 Pro Glu Pro Pro Phe 141 Trp Glu Pro	Leu Glu 1320 Ser Fro Thr Glu 140 Pro Gly Pro Glu	Pro 130: Glu Thr Pro Ala Val 138 Met O Ala Thr Ala Val 146 Ala	Pro Leu Asp Leu 137 Gly Lys Pro Phe Leu 145 Pro 5	Pro Lys Pro Val 135 Glu Val Val Leu 143 Asn 0	Trp Gly Pro 134 Ala 5 Gly Ala Arg Pro 142 Pro 5 Pro	Arg 1329 Leu 0 Glu Gly Ser Asp 140 Gly Thr Gly Gly Ser	Asp 131 Gly 5 Ser Leu Leu 139 Ser 5 Ser Thr Pro Arg 147 Val	Arg Arg Ala Pro Trp Gly 137 Leu Ser Trp Leu Lys 145 Leu 0	Thr Pro Val Thr 1360 Pro Pro Leu Asp Thr 1440 Gly 5 Leu
Gly Lys As  Asn Glu Va  13  His Leu Pr 1330  Gly Ser Th 1345  Gly Gly Th  Val Asp Se  Pro Pro Il 13  Glu Pro Gl 1410  Leu Gln Tr 1425  Gly Leu Gl  Gln Pro Gl  Ser Thr Pr	p Ser 130 l Phe 15 o Pro r His r Val r Glu 138 e Ala 95 y Thr r Val y His u Ser 146 o Ala 75	128: Gln O Lys Arg Ser Ala 136 Leu O Pro Ala : Met 144 : Leu O Trp	Ser Asp Pro Ser 135 Trp Trp Leu Ser Val 143 Pro 5 Ser Asp	Gln Asp Ser 133 Pro Glu Pro Pro Phe 141 Trp Glu Pro Ser	Leu Glu 1320 Ser Ser Pro Thr Glu 140 Pro Gly Pro Glu Pro 148	Pro 130: Glu Thr Pro Ala Val 138 Met O Ala Thr Ala Val 146 Ala	Pro Leu Asp Leu 137 Gly Lys Pro Phe Leu 145 Pro Asn	Pro Lys Pro Val 135 Glu Val Val Gly Leu 143 Asn 0 Leu Ser	Trp Gly Pro 134 Ala 5 Gly Ala Arg Pro 142 Pro 5 Pro	Arg 1323 Leu 0 Glu Gly Ser Asp 140 Gly Thr Gly Ser	Asp 131 Gly Ser Leu Leu 139 Ser Thr Pro Arg 147 Val	1290 Arg O Ala Pro Trp Gly 137 Leu O Ser Trp Leu Lys 145 Leu O Pro	Thr Pro Val Thr 1360 Pro Pro Leu Asp Thr 1440 Gly Leu Glu

1495

1490

1500

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Pro Leu Val Val Arg Asn Ala Ser Trp Gln Ala Gly Asn Trp Ser Glu
            1510 1515 1520
Cys Ser Thr Thr Cys Gly Leu Gly Ala Val Trp Arg Pro Val Arg Cys
              1525 1530
Ser Ser Gly Arg Asp Glu Asp Cys Ala Pro Ala Gly Arg Pro Gln Pro
                             1545
Ala Arg Arg Cys His Leu Arg Pro Cys Ala Thr Trp His Ser Gly Asn
                         1560
Trp Ser Lys Cys Ser Arg Ser Cys Gly Gly Gly Ser Ser Val Arg Asp
                                        1580
                    1575
Val Gln Cys Val Asp Thr Arg Asp Leu Arg Pro Leu Arg Pro Phe His
                                    1595
                 1590
Cys Gln Pro Gly Pro Ala Lys Pro Pro Ala His Arg Pro Cys Gly Ala
              1605
                                1610
Gln Pro Cys Leu Ser Trp Tyr Thr Ser Ser Trp Arg Glu Cys Ser Glu
           1620
                             1625
Ala Cys Gly Gly Glu Gln Gln Arg Leu Val Thr Cys Pro Glu Pro
                         1640
Gly Leu Cys Glu Glu Ala Leu Arg Pro Asn Thr Thr Arg Pro Cys Asn
                      1655
Thr His Pro Cys Thr Gln Trp Val Val Gly Pro Trp Gly Gln Cys Ser
                                    1675
                 1670
Ala Pro Cys Gly Gly Gly Val Gln Arg Arg Leu Val Lys Cys Val Asn
              1685
                                 1690
Thr Gln Thr Gly Leu Pro Glu Glu Asp Ser Asp Gln Cys Gly His Glu
                              1705
           1700
Ala Trp Pro Glu Ser Ser Arg Pro Cys Gly Thr Glu Asp Cys Glu Pro
                         1720
Val Glu Pro Pro Arg Cys Glu Arg Asp Arg Leu Ser Phe Gly Phe Cys
                                        1740
                      1735
Glu Thr Leu Arg Leu Leu Gly Arg Cys Gln Leu Pro Thr Ile Arg Thr
                                    1755
                 1750
Gln Cys Cys Arg Ser Cys Ser Pro Pro Ser His Gly Ala Pro Ser Arg
                                 1770
Gly His Gln Arg Val Ala Arg Arg
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ttgaggacat ttgtacagag tcaggtaact ggaggaactg gactacaacc ctgctcagtg
cagccagtgt gactgagcgc ctcctgagag ccaggtggat tctgccctca aggatccatg
ctctgggcaa gaaacccacc catcagcagg tggcttctgc tgagccacaa caggcacaca
300
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gaggggtcca tgggagccca gaggggagca tctgaccagg ctcaggggaa ggaatgtgtc
cagcagagtc acagaggagc agtatgagtt agccaggtag gggacattcc aggcagggga
gcagcaggac aaaagcatag aggtagcact gccagtgcca agttccaaaa taagaggctg
actgctacag ggtccatata ggaaaataat gggaaataca tttggacagg aggtggggtc
tgtaacaaag gactttaatt ccaggttaag gaatctggat gttaaaacaa cattagctgc
catttctaca gtgctacttc ccaggctctg tgcctttctg ggagccttga aggtttgtga
gctggaagga gatattagga acaaaacgat gcatgaggat agctcaggta aaggttattg
ataagtaaga atgcctggca ccaaacgcgt
<210> 2288
<211> 142
<212> PRT
<213> Homo sapiens
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Lys Ser Phe Val Thr Asp Pro Thr Ser Cys Pro Asn Val Phe Pro Ile
Ile Phe Leu Tyr Gly Pro Cys Ser Ser Gln Pro Leu Ile Leu Glu Leu
                             40
Gly Thr Gly Ser Ala Thr Ser Met Leu Leu Ser Cys Cys Ser Pro Ala
                        55
Trp Asn Val Pro Tyr Leu Ala Asn Ser Tyr Cys Ser Ser Val Thr Leu
                                         75
                     70
Leu Asp Thr Phe Leu Pro Leu Ser Leu Val Arg Cys Ser Pro Leu Gly
                                     90
Ser His Gly Pro Leu Cys Val Pro Val Val Ala Gln Gln Lys Pro Pro
                                 105
Ala Asp Gly Trp Val Ser Cys Pro Glu His Gly Ser Leu Arg Ala Glu
                             120
Ser Thr Trp Leu Ser Gly Gly Ala Gln Ser His Trp Leu His
                        135
    130
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<212> DNA
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ccgagcgccg ccgcctccgg catggatcat tgcgtgacgg tggagcgcga gctggagaag
gtgctgcaca agttctcggg ctacgggcag ctgtgcgagc gcggcctgga ggagctcatc
180
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gactacaccg gcggtctcaa gcaccagatc ctgcagagcc acggccaaga tgctgaatta
tcagggacac tttcacttgt tttgacacag ggctgtaaaa gaataanaag gggatactgg
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ccattgatga ggattcactt t
381
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Lys Phe Ser Gly Tyr Gly Gln Leu Cys Glu Arg Gly Leu Glu Glu Leu
Ile Asp Tyr Thr Gly Gly Leu Lys His Gln Ile Leu Gln Ser His Gly
Gln Asp Ala Glu Leu Ser Gly Thr Leu Ser Leu Val Leu Thr Gln Gly
Cys Lys Arg Ile Xaa Arg Gly Tyr Trp Phe Lys Asn Trp Pro Pro Thr
Thr Lys Thr Ser Thr Ala Val Phe Leu Gly Leu Glu Lys Pro Leu Met
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Arq Ile His Phe
            100
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<212> DNA
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acatgttcgt tgtgacgatg cagctgagcc attgaatcga cggtcagcgc catgaacgcc
cgatgctcgt tgacggtaag actcgccgac ccagcaacgt cggcggttgt cgtgccctca
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geotegegta attettgggg accgaggtee teggegegee ggtetgacce caeegeettg
aacttggcgt taaggaccga cctcacgtga gcctcccctg acgggttaga caggtattcc
tectgecagt ecegegetge ecgaggeaag eteatecece agttgagetg ecaatacege
540
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cacgacagga tctcgaaaag attggggacg cgt
573
<210> 2292
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Asn Pro Ser Gly Glu Ala His Val Arg Ser Val Leu Asn Ala Lys Phe
                                25
Lys Ala Val Gly Ser Asp Arg Arg Ala Glu Asp Leu Gly Pro Gln Glu
Leu Arg Glu Ala Ser Ala Ala Phe Phe Ala Gly Gly His Asp Val Ile
Val Ala Arg Arg His Tyr Thr Asp Glu Gly Thr Thr Thr Ala Asp Val
Ala Gly Ser Ala Ser Leu Thr Val Asn Glu His Arg Ala Phe Met Ala
Leu Thr Val Asp Ser Met Ala Gln Leu His Arg His Asn Glu His Val
                                105
Arg Tyr Val Val Val Phe Gln Asn Trp Leu Lys Pro Ala Gly Ala Ser
                            120
Ile Asp His Leu His Lys Gln Val Val Ala Ile Asp
    130
<210> 2293
<211> 358
<212> DNA
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gtgaacactg tcgctaagaa ctggttgaac cggctcaaca cgccggatat gaaacccact
gaggagatca agcggcagtt ccaaggtctg cattggttgg gacgtaagta tgggctcaac
cacggagagt totatottga cgacgagcag tgggccacgc tcatggccgg gtcctctttc
gaggcgaatc cgcgcattaa gagcaacttt gattccgagg gcgctgttgt ggatccggat
tecgatteae ttgetgggge tgategagat geeegaggtg etteggatge atgeette
358
<210> 2294
<211> 115
<212> PRT
<213> Homo sapiens
<400> 2294
Met Glu Ala Ala Leu Val Gly Ala His Lys Thr Gly Gly Cys Pro Leu
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10
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Val Asn Thr Val Ala Lys Asn Trp Leu Asn Arg Leu Asn Thr Pro Asp
                                25
Met Lys Pro Thr Glu Glu Ile Lys Arg Gln Phe Gln Gly Leu His Trp
Leu Gly Arg Lys Tyr Gly Leu Asn His Gly Glu Phe Tyr Leu Asp Asp
Glu Gln Trp Ala Thr Leu Met Ala Gly Ser Ser Phe Glu Ala Asn Pro
Arg Ile Lys Ser Asn Phe Asp Ser Glu Gly Ala Val Val Asp Pro Asp
                                    90
Ser Asp Ser Leu Ala Gly Ala Asp Arg Asp Ala Arg Gly Ala Ser Asp
                                105
Ala Cys Leu
        115
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<212> DNA
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ggggcgtatg gctgctcggt cattaccgca ctggtagcgc aaaatacgcg cggcgtgcag
120
teggtgtate gtategaace ggattttgte ggtgcacaae tggactetgt gttcagegat
gtccgcattg attccaccaa aatcggcatg ctggcagagg cggatatcgt ggaagcggtc
geggagegee teaaacatta tegegttaaa aacgtggtae ttgataeggt gatgetggeg
aaaagtggcg atccgctgct atctcctgct gctgtcgaaa ctctgcgaaa acaccttctg
ccacacgtcg cgctgatcac gccaaatttg ccggaggcgg cggcgctgct ggatgcgcct
catgecegta eegageaega gatgaaagag eaggggegeg eacttetgge gettggetge
gaggcagtgc tgatgaaagg cggccatctt gacgatcctg agagcccgga ctggctcttc
540
acgcgt
546
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Gly Thr Asp Pro Ser Gly Gly Ala Gly Ile Arg Xaa Asp Leu Xaa Thr
 Phe Ser Ala Leu Gly Ala Tyr Gly Cys Ser Val Ile Thr Ala Leu Val
                                 25
Ala Gln Asn Thr Arg Gly Val Gln Ser Val Tyr Arg Ile Glu Pro Asp
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```
40
Phe Val Gly Ala Gln Leu Asp Ser Val Phe Ser Asp Val Arg Ile Asp
Ser Thr Lys Ile Gly Met Leu Ala Glu Ala Asp Ile Val Glu Ala Val
                                      75
Ala Glu Arg Leu Lys His Tyr Arg Val Lys Asn Val Val Leu Asp Thr
                                  90
Val Met Leu Ala Lys Ser Gly Asp Pro Leu Leu Ser Pro Ala Ala Val
                              105
Glu Thr Leu Arg Lys His Leu Leu Pro His Val Ala Leu Ile Thr Pro
                          120
Asn Leu Pro Glu Ala Ala Ala Leu Leu Asp Ala Pro His Ala Arg Thr
                       135
Glu His Glu Met Lys Glu Gln Gly Arg Ala Leu Leu Ala Leu Gly Cys
                                      155
                   150
Glu Ala Val Leu Met Lys Gly Gly His Leu Asp Asp Pro Glu Ser Pro
                                  170
               165
Asp Trp Leu Phe Thr Arg
           180
<210> 2297
<211> 414
<212> DNA
<213> Homo sapiens
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aaaggaaaaa ccccttttt tttttttt ttttatacac atgagggtct ctggttaata
aatgttgaga tgtagggtta ggtgagatta aacaggttct ttttttcatg atttctcgga
gtetttatga tgetecacae cagtaettet caaagetgae tgtgtataea aaacaetggg
gatctgaccc acatgtaaag tctgatttct ttggtctggg gcaggcctga aatn
414
<210> 2298
<211> 67
<212> PRT
<213> Homo sapiens
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Lys Lys Arg Glu Phe Ser His Val Gly Gly Gly Phe Gly Leu Phe
Pro Pro Lys Thr Pro Pro Pro His Pro Pro Lys Gly Arg Lys Ala Gly
Pro Lys Pro Pro Gly Pro Pro Gly Gly Ala Lys Gly Lys Thr Pro
                           40
Phe Phe Phe Phe Phe Tyr Thr His Glu Gly Leu Trp Leu Ile Asn
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60
                        55
    50
Val Glu Met
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agtttggata tgactgaggc tctccaatgg gccagatatc actggcgacg gctgatcaga
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cgcaagtcct ctcagatccc taaactgtca ggaaggcacc ggattgttgt tccccacatc
cagecettea aggatgagta tgagaagtte teeggageet atgtgaacaa tegaataega
acaacaaagt acacacttct gaattttgtg ccaagaaatt tatttgaaca atttcacaga
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ttccaaaagg aaatcaccat gttgcctctg gtggtggtcc ttacaattat cgcaattaaa
gatggcctgg aagattatcg gaaatacaaa attgacaaac agatcaataa tttaataact
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tecactgate cagatggaat etgteacatt gagaettetg gtettgatgg agagageaat
ttaaaacaga ggcaggtggt tcggggatat gcagaacagg actctgaagt tgatcctgag
aagttttcca gtaggataga atgtgaaagc ccaaacaatg acctcagcag attccgaggc
ttcctagaac attccaacaa agaacgc
987
<210> 2300
<211> 266
<212> PRT
<213> Homo sapiens
<400> 2300
Met Thr Glu Ala Leu Gln Trp Ala Arg Tyr His Trp Arg Arg Leu Ile
                                     10
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Arg Gly Ala Thr Arg Asp Asp Asp Ser Gly Pro Tyr Asn Tyr Ser Ser
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Leu Leu Ala Cys Gly Arg Lys Ser Ser Gln Ile Pro Lys Leu Ser Gly 40

20

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Arg His Arg Ile Val Val Pro His Ile Gln Pro Phe Lys Asp Glu Tyr
Glu Lys Phe Ser Gly Ala Tyr Val Asn Asn Arg Ile Arg Thr Thr Lys
Tyr Thr Leu Leu Asn Phe Val Pro Arg Asn Leu Phe Glu Gln Phe His
                85
Arg Ala Ala Asn Leu Tyr Phe Leu Phe Leu Val Val Leu Asn Trp Val
                                105
            100
Pro Leu Val Glu Ala Phe Gln Lys Glu Ile Thr Met Leu Pro Leu Val
                            120
Val Val Leu Thr Ile Ile Ala Ile Lys Asp Gly Leu Glu Asp Tyr Arg
Lys Tyr Lys Ile Asp Lys Gln Ile Asn Asn Leu Ile Thr Lys Val Tyr
                                        155
                    150
Ser Arg Lys Glu Lys Lys Tyr Ile Asp Arg Cys Trp Lys Asp Val Thr
                165
                                    170
Val Gly Asp Phe Ile Arg Leu Ser Cys Asn Glu Val Ile Pro Ala Asp
            180
                                185
Met Val Leu Leu Phe Ser Thr Asp Pro Asp Gly Ile Cys His Ile Glu
                                                205
                            200
Thr Ser Gly Leu Asp Gly Glu Ser Asn Leu Lys Gln Arg Gln Val Val
                        215
Arg Gly Tyr Ala Glu Gln Asp Ser Glu Val Asp Pro Glu Lys Phe Ser
                                        235
                    230
Ser Arg Ile Glu Cys Glu Ser Pro Asn Asn Asp Leu Ser Arg Phe Arg
                245
Gly Phe Leu Glu His Ser Asn Lys Glu Arg
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<211> 390
<212> DNA
<213> Homo sapiens
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<210> 2302
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<212> PRT
<213> Homo sapiens
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Ser Glu Glu Met Xaa Ala Thr Ser Ser Ala Xaa Phe Pro Glu Ala Cys
Asp Asn Thr Met Glu Ile Ala Glu Xaa Val Ala Thr Leu Asn Ser Thr
                            40
Gln Thr Gln Xaa Tyr Met Pro Asp Phe Pro Thr Pro Glu Gly Glu Asn
                                            60
Glu Glu Ser Trp Phe Val Lys Glu Val Glu Arg Gly Leu His Tyr Arg
                                        75
Phe Pro Glu Gly Ile Pro Asp Asp Val Arg Lys Gln Ala Asp Tyr Glu
                                    90
Val Gly Ile Ile Thr Gln Met Gly Phe Pro Gly Tyr Phe Leu Val Val
                                105
Ala Asp Phe Ile Asn Trp Ala Lys Asn Asn Gly Ile Arg Val Gly Pro
                                                 125
                            120
        115
Gly Arg
    130
<210> 2303
<211> 638
<212> DNA
<213> Homo sapiens
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atcttgctgt ggtcaggagc tggcctctct agctccttca tctccccccg gtattcttgg
180
ctettettee tgteeegggg categaggge actggetegg ceagetacte caccategeg
cccaccgtcc tgggcgacct cttcgtgagg gaccagcgca cccgcgtgct ggctgtcttc
tacatcttta teccegttgg aagtggtetg ggetacgtge tgggggtegge tgtgaegatg
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tggagttttg tgtggtcgac cctcggagtg accgccatgg cctttgtgac tggagccctg
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638
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<210> 2304

<212> PRT <213> Homo sapiens <400> 2304 Xaa Asp Pro Gly Cys Pro Cys Val Ser Pro Ser Val Phe Val Ser Cys Leu Leu Ser Ala Pro Val Phe Gly Tyr Leu Gly Asp Arg His Ser 25 Arg Lys Ala Thr Met Ser Phe Gly Ile Leu Leu Trp Ser Gly Ala Gly 40 Leu Ser Ser Ser Phe Ile Ser Pro Arg Tyr Ser Trp Leu Phe Phe Leu 55 Ser Arg Gly Ile Glu Gly Thr Gly Ser Ala Ser Tyr Ser Thr Ile Ala 75 Pro Thr Val Leu Gly Asp Leu Phe Val Arg Asp Gln Arg Thr Arg Val Leu Ala Val Phe Tyr Ile Phe Ile Pro Val Gly Ser Gly Leu Gly Tyr 105 Val Leu Gly Ser Ala Val Thr Met Leu Thr Gly Asn Trp Arg Trp Ala 120 Leu Arg Val Met Pro Cys Leu Glu Ala Val Ala Leu Ile Leu Leu Ile 135 Leu Leu Val Pro Asp Pro Pro Arg Gly Ala Ala Glu Thr Gln Gly Glu 155 Gly Ala Val Gly Gly Phe Arg Ser Ser Trp Cys Glu Asp Val Arg Tyr 170 Leu Gly Lys Asn Trp Ser Phe Val Trp Ser Thr Leu Gly Val Thr Ala 185 Met Ala Phe Val Thr Gly Ala Leu Gly Phe Trp Ala Pro Lys Phe Leu 195 Leu Glu Ala Arg 210 <210> 2305 <211> 340 <212> DNA <213> Homo sapiens <400> 2305 geceegeet etatetteeg geategteae agtegeateg tgaeggtaet ggetggagte teggaceage acaetttgae egtegtggte geetegtgae atggggtaac gegaaceteg tegeteetgt tettgacete tteegtgeee ecattgacaa egategggea agtteaetgg cccgcaacgc tattggtgac gcagcactcg cagctggtct cgaccgactc gtccacacca cggcgtcggt gcgcgacgag ggcgatgagt tggtcgtcgt tactcgcagc gctgctgccg ccgcacgcaa ttccatgacg acaacgtgga gttggcgcgc

<210> 2306

<211> 212

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<211> 101
<212> PRT
<213> Homo sapiens
<400> 2306
Met Glu Leu Arg Ala Ala Ala Ala Leu Arg Val Thr Thr Thr Asn
Ser Ser Pro Ser Ser Arg Thr Asp Ala Val Val Trp Thr Ser Arg Ser
                                25
Arg Pro Ala Ala Ser Ala Ala Ser Pro Ile Ala Leu Arg Ala Ser Glu
                            40
Leu Ala Arg Ser Leu Ser Met Gly Ala Arg Lys Arg Ser Arg Thr Gly
                        55
Ala Thr Arg Phe Ala Leu Pro His Val Thr Arg Arg Pro Arg Arg Ser
Lys Cys Ala Gly Pro Arg Leu Gln Pro Val Pro Ser Arg Cys Asp Cys
Asp Asp Ala Gly Arg
            100
<210> 2307
<211> 360
<212> DNA
<213> Homo sapiens
<400> 2307
ngcttctcag ctgaaggggg agataaagct ctacataaga tgggtccagg tgggggcaaa
gccaaggcac tgggtgggc tggcagtggg agcaagggct cagcaggtgg cggaagcaag
cgacggctga gcagcgaaga cagctccctg gagccagacc tggccgagat gagcctggat
gacagcagcc tggccctggg cgcagaggcc aggaccttcg ggggattccc tgagagccct
ccaccctgtc ctctccacgg tggctcccga ggcccttcca ctttccttcc tgagccccca
gatacttatg aagaagatgg tgatgagagt ggcaatgggc ttcccaaaac caaagaggca
360
<210> 2308
<211> 120
<212> PRT
<213> Homo sapiens
<400> 2308
Xaa Phe Ser Ala Glu Gly Gly Asp Lys Ala Leu His Lys Met Gly Pro
Gly Gly Gly Lys Ala Lys Ala Leu Gly Gly Ala Gly Ser Gly Ser Lys
Gly Ser Ala Gly Gly Gly Ser Lys Arg Arg Leu Ser Ser Glu Asp Ser
Ser Leu Glu Pro Asp Leu Ala Glu Met Ser Leu Asp Asp Ser Ser Leu
                        55
Ala Leu Gly Ala Glu Ala Arg Thr Phe Gly Gly Phe Pro Glu Ser Pro
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70
65
Pro Pro Cys Pro Leu His Gly Gly Ser Arg Gly Pro Ser Thr Phe Leu
Pro Glu Pro Pro Asp Thr Tyr Glu Glu Asp Gly Asp Glu Ser Gly Asn
                                105
            100
Gly Leu Pro Lys Thr Lys Glu Ala
        115
<210> 2309
<211> 395
<212> DNA
<213> Homo sapiens
<400> 2309
ggatccctac aaatggggcc ctgctctgag cacattccca tgagggctgc ctgccctgtg
caetetetge eetgggeege ggggeetgae tgggtteeea eeteeteeta eecaetgggg
tettttccag caggeacagg gattecteat gggggaggea gageecacce gtetgteete
ggtgacggcc tgagctgtgc acggcctccc ctgccctcct gttctcaggc cccccagggt
ccatccagcc ccagcgtgtg gcgttctggc tcttccctgg agtctcctcc cagaccacgc
gactccactc acactgtgcc tagcggactg tgtggttgat gcagccggct cacttgagtg
tgttgtgtta tgcccacaac aggcttgccg tcacc
395
<210> 2310
<211> 108
<212> PRT
<213> Homo sapiens
<400> 2310
Met Gly Pro Cys Ser Glu His Ile Pro Met Arg Ala Ala Cys Pro Val
His Ser Leu Pro Trp Ala Ala Gly Pro Asp Trp Val Pro Thr Ser Ser
Tyr Pro Leu Gly Ser Phe Pro Ala Gly Thr Gly Ile Pro His Gly Gly
                             40
Gly Arg Ala His Pro Ser Val Leu Gly Asp Gly Leu Ser Cys Ala Arg
                         55
Pro Pro Leu Pro Ser Cys Ser Gln Ala Pro Gln Gly Pro Ser Ser Pro
                                         75
                     70
Ser Val Trp Arg Ser Gly Ser Ser Leu Glu Ser Pro Pro Arg Pro Arg
                                     90
                85
Asp Ser Thr His Thr Val Pro Ser Gly Leu Cys Gly
                                 105
             100
 <210> 2311
 <211> 378
 <212> DNA
 <213> Homo sapiens
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<400> 2311
gtgcacgccg agatgctgcc gcaagacaag cagcgtgtcg tcggcgagtt gaagcgccag
ggetteteag tgateaaggt eggegatgge ateaatgatt gegaegetet egeegeggeg
gatgtcggca gtcccatggg cggcagcgcg gacgtggctc tcgaaacggc cgatgctgcc
gtccttcacg gacgggtggg ggacgtcttc gcgatgatcg ccctatcgaa gcgaaccatg
gccaacattc gacagaacat cgcgatcgcg atcgggctaa aggcggtgtt ccttgtaacg
acceptcgtcg gcatcacggg gctttggcct gcaatcctcg ccgatacggg gaccacggag
cttgtgacca tgaacgcg
378
<210> 2312
<211> 126
<212> PRT
<213> Homo sapiens
<400> 2312
Val His Ala Glu Met Leu Pro Gln Asp Lys Gln Arg Val Val Gly Glu
Leu Lys Arg Gln Gly Phe Ser Val Ile Lys Val Gly Asp Gly Ile Asn
Asp Cys Asp Ala Leu Ala Ala Ala Asp Val Gly Ser Pro Met Gly Gly
                            40
Ser Ala Asp Val Ala Leu Glu Thr Ala Asp Ala Ala Val Leu His Gly
                        55
Arg Val Gly Asp Val Phe Ala Met Ile Ala Leu Ser Lys Arg Thr Met
                                         75
                    70
Ala Asn Ile Arg Gln Asn Ile Ala Ile Ala Ile Gly Leu Lys Ala Val
                                     90
Phe Leu Val Thr Thr Val Val Gly Ile Thr Gly Leu Trp Pro Ala Ile
                                105
Leu Ala Asp Thr Gly Thr Thr Glu Leu Val Thr Met Asn Ala
<210> 2313
<211> 669
<212> DNA
<213> Homo sapiens
<400> 2313
ctagtggcat ggtctcgctg gtctttagtg gagcataccg acacatcggt gactcaaacg
atccgaatca tggctcgtcc tggttggcct ggaaccatta acgtacgcct cacccatcgc
ttaagcgacg ccggtctagc tgtcgaagtc accgcgcgca atgtcggtac gacagcgggg
ccgcttggat acgcagcaca cccctatctc tgtctgggtg gcaccatcga cgactggaca
240
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gtcgacgccc cgtttacctc gtggttacag gtcgatgatc ggctgctacc aatgcagatg
cgcgagatgg acagcatcca cgcgctgaac ggtctcacgg gcggacagcg caccttcgat
accecttaca ccetteaage aggacegaac cetteggatee cccecatege etateceget
ctcaacggtg aaacgagcca cgaattgtgg ggcgacgccg cgatgagctg ggtgcaagtc
tacactccag acgaccgcca cagtctggcc atcgagccaa tgacctgcgg cccagatgca
tttaatgagg gcccgaccca cggtgacgtc attcgactgg agcccggtaa tgacgtcaca
ctgcactggg gcatcgccta acccgcggaa gctcgaaagg acaaggacgg gaaggcagga
ttcacgcgt
669
<210> 2314
<211> 206
<212> PRT
<213> Homo sapiens
<400> 2314
Leu Val Ala Trp Ser Arg Trp Ser Leu Val Glu His Thr Asp Thr Ser
                                     10
Val Thr Gln Thr Ile Arg Ile Met Ala Arg Pro Gly Trp Pro Gly Thr
                                25
Ile Asn Val Arg Leu Thr His Arg Leu Ser Asp Ala Gly Leu Ala Val
                            40
Glu Val Thr Ala Arg Asn Val Gly Thr Thr Ala Gly Pro Leu Gly Tyr
Ala Ala His Pro Tyr Leu Cys Leu Gly Gly Thr Ile Asp Asp Trp Thr
                                         75
Val Asp Ala Pro Phe Thr Ser Trp Leu Gln Val Asp Asp Arg Leu Leu
                                     90
Pro Met Gln Met Arg Glu Met Asp Ser Ile His Ala Leu Asn Gly Leu
                                 105
Thr Gly Gly Gln Arg Thr Phe Asp Thr Ala Tyr Thr Val Lys Gly Gly
                            120
Arg Asn Arg Arg Ile Ala Arg Met Ala Tyr Pro Gly Leu Asn Gly Glu
                        135
Thr Ser His Glu Leu Trp Gly Asp Ala Ala Met Ser Trp Val Gln Val
                                         155
Tyr Thr Pro Asp Asp Arg His Ser Leu Ala Ile Glu Pro Met Thr Cys
                                     170
Gly Pro Asp Ala Phe Asn Glu Gly Pro Thr His Gly Asp Val Ile Arg
                                 185
Leu Glu Pro Gly Asn Asp Val Thr Leu His Trp Gly Ile Ala
                             200
        195
<210> 2315
<211> 546
<212> DNA
<213> Homo sapiens
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<400> 2315
nacgcgtccc tcatcgatac cgagcccggg atggggaaaac gggtgtatcg cgttgaggcc
acccaaggcc gaccaattcg catcgataag gcggtcgctt atcacacttc tcgcggcgtg
ccggtacatg aactgtttga ccgagtgcgc cgcagcttag accgagtgcg tgaacagggg
cacaacgtct actacgacga acagcgtgca tggcttgacg attactgggc aacggctgat
gttgaggtcg agggtgcccc gaccggtatt cagcaggctg tcaggtggaa ccttttccag
attgctcagg catcagcccg tgcagatcaa cttggcattc cggcaaaggg tgtaaccggg
tcaggctatg aaggccacta cttttgggac actgaggttt atgtcatccc gatgttgacc
tacactcatc caagaatcgc tgagaatgcg ctgagattcc gggtgaatac ccttccgcaa
getegaegee gggetaagga attgtetgaa egaggegeee tttteeegtg gegaacaate
accggt
546
<210> 2316
<211> 182
<212> PRT
<213> Homo sapiens
<400> 2316
Xaa Ala Ser Leu Ile Asp Thr Glu Pro Gly Met Gly Lys Arg Val Tyr
                                    10
Arg Val Glu Ala Thr Gln Gly Arg Pro Ile Arg Ile Asp Lys Ala Val
                                25
Ala Tyr His Thr Ser Arg Gly Val Pro Val His Glu Leu Phe Asp Arg
                             40
Val Arg Arg Ser Leu Asp Arg Val Arg Glu Gln Gly His Asn Val Tyr
                                             60
Tyr Asp Glu Gln Arg Ala Trp Leu Asp Asp Tyr Trp Ala Thr Ala Asp
                                         75
Val Glu Val Glu Gly Ala Pro Thr Gly Ile Gln Gln Ala Val Arg Trp
                                     90
Asn Leu Phe Gln Ile Ala Gln Ala Ser Ala Arg Ala Asp Gln Leu Gly
                                 105
            100
Ile Pro Ala Lys Gly Val Thr Gly Ser Gly Tyr Glu Gly His Tyr Phe
                             120
Trp Asp Thr Glu Val Tyr Val Ile Pro Met Leu Thr Tyr Thr His Pro
                                             140
                        135
Arg Ile Ala Glu Asn Ala Leu Arg Phe Arg Val Asn Thr Leu Pro Gln
                                         155
Ala Arg Arg Ala Lys Glu Leu Ser Glu Arg Gly Ala Leu Phe Pro
                                                         175
                                     170
                165
Trp Arg Thr Ile Thr Gly
            180
```

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<210> 2317
<211> 496
<212> DNA
<213> Homo sapiens
<400> 2317
geeggeggge tegggaaegg teactgaeet geageaggea atggeggteg eggtttaate
agggttctgc acggagtttt ggatagtccg tccagtcgcc actggcaagg cgcgaccagg
cagctgctga cgctgctgtg atgccgagga gatcggagac gattcgtggg tgcatctgcc
gggtcagttc gatcagegeg gtegttcgag egetteetga aegeageece tgetggegea
gacgtcggct gagtgggcct ggtgtgagat gcaaccccgg attcctgcca ggaaagagcc
atccctcqqq tcqqtqtecc gatqtqtcaq cqaqctcqqc gatcqcattc ccqaqqacct
cgggcagttc gattggctcg gctccgatgg tgagcttccc cggtcgtgat gtcacgtcga
cctgctcacg ggtgagcgcg acgatgcgag tgaggtggag gccgtagagg agcacgagca
acccagcggc acgcgt
496
<210> 2318
<211> 108
<212> PRT
<213> Homo sapiens
<400> 2318
Met Pro Arg Arg Ser Glu Thr Ile Arg Gly Cys Ile Cys Arg Val Ser
                                    10
Ser Ile Ser Ala Val Val Arg Ala Leu Pro Glu Arg Ser Pro Cys Trp
Arg Arg Arg Leu Ser Gly Pro Gly Val Arg Cys Asn Pro Gly Phe
Leu Pro Gly Lys Ser His Pro Ser Gly Arg Cys Leu Asp Val Ser Ala
Ser Ser Ala Ile Ala Phe Pro Arg Thr Ser Gly Ser Ser Ile Gly Ser
                                       . 75
                    70
Ala Pro Met Val Ser Phe Pro Gly Arg Asp Val Thr Ser Thr Cys Ser
Arg Val Ser Ala Thr Met Arg Val Arg Trp Arg Pro
            100
<210> 2319
<211> 1748
<212> DNA
<213> Homo sapiens
<400> 2319
ntgatcaagt ctcggtctct ggattatacc tttgttcctc gaacttggat ctttcctgct
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gaatatactc	aattccaaaa	ttatgtgaaa	gaattgaaga	aaaaacggaa	gcagaaaact
	aaccagctaa	tggtgcaatg	ggtcatggga	tttctttgat	aagaaatggt
	catctcagga	tcatttgatt	gttcaagaat	acattgaaaa	gcctttccta
atggaaggtt	acaagtttga	cttacgaatt	tatattctgg	ttacatcgtg	tgatccacta
aaaatatttc 360	tctaccatga	tgggcttgtg	cgaatgggta	cagagaagta	cattccacct
	atttgaccca	gttatacatg	catctgacaa	actactccgt	gaacaagcat
aatgagcatt 480	ttgaacggga	tgaaactgag	aacaaaggca	gcaaacgttc	catcaaatgg
tttacagaat 540	tccttcaagc	aaatcaacat	gatgttgcta	agttttggag	tgatatttca
gaattggtgg 600	taaagaccct	gattgtagca	gaacctcatg	tcctgcatgc	ctatcgaatg
tgtagacctg	gtcaacctcc	aggaagcgaa	agtgtctgct	ttgaagtcct	gggatttgat
attttgttgg 720	atagaaaact	aaagccatgg	cttctggaga	ttaaccgagc	cccaagcttt
ggaactgatc 780	agaaaataga	ctatgatgta	aaaaggggag	tgctgctaaa	tgcgttgaag
ctactaaaca 840	taaggaccag	tgacaaaaga	agaaacttgg	ccaaacaaaa	agctgaggct
caaaggaggc 900	tctatggtca	aaattcaatt	aaaaggctct	taccaggctc	ctcagactgg
	gacaccagtt	ggagaggcgg	aaagaagagt	tgaaagagag	actcgctcaa
gtacgaaagc 1020	agatctcacg	agaagaacat	gaaaatcgac	atatggggaa	ttatagacga
atttatcctc 1080	ctgaagataa	agcattactt	gaaaagtatg	aaaatttgtt	agctgttgcc
tttcagacct 1140	tcctttcagg	aagagcagct	tcattccagc	gagagttgaa	taatcctttg
aaaaggatga 1200	aggaagaaga	tattttggat	cttctggagc	aatgtgaaat	tgatgatgaa
aagttgatgg 1260	gaaaaactac	caagactcga	ggaccaaagc	ctctgtgttc	tatgcctgag
agtactgaga 1320	taatgaaaag	accaaagtac	tgcagcagtg	acagcagtta	tgatagtagc
agcagctctt 1380	cagaatctga	cgaaaatgaa	aaagaagagt	accaaaataa	gaaaagagaa
aagcaagtta 1440	catataatct	taaaccctcc	aaccactaca	aattaattca	acaacccagc
tccataagac 1500	gttcagtcag	ctgccctcgg	tccatctctg	ctcaatcacc	ttccagtggg
gacacccgcc 1560	cattttctgc	tcaacaaatg	atatctgtgt	cacggccaac	ttctgcatct
	ccttaaaccc	gggccttcct	cctacatgag	gcatctgcct	cacagtaatg
	taccaactct	caagtgagtg	agtctttgcg	gcaactgaaa	acaaaagaac

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aagaagatga totaacaagt cagacottat ttgttotcaa agacatgaag atcoggttto
1740
caggaaag
1748
<210> 2320
<211> 532
<212> PRT
<213> Homo sapiens
<400> 2320
Xaa Ile Lys Ser Arg Ser Leu Asp Tyr Thr Phe Val Pro Arg Thr Trp
                                    10
Ile Phe Pro Ala Glu Tyr Thr Gln Phe Gln Asn Tyr Val Lys Glu Leu
                                25
Lys Lys Lys Arg Lys Gln Lys Thr Phe Ile Val Lys Pro Ala Asn Gly
Ala Met Gly His Gly Ile Ser Leu Ile Arg Asn Gly Asp Lys Leu Pro
                        55
Ser Gln Asp His Leu Ile Val Gln Glu Tyr Ile Glu Lys Pro Phe Leu
Met Glu Gly Tyr Lys Phe Asp Leu Arg Ile Tyr Ile Leu Val Thr Ser
                                    90
Cys Asp Pro Leu Lys Ile Phe Leu Tyr His Asp Gly Leu Val Arg Met
                                105
Gly Thr Glu Lys Tyr Ile Pro Pro Asn Glu Ser Asn Leu Thr Gln Leu
                            120
Tyr Met His Leu Thr Asn Tyr Ser Val Asn Lys His Asn Glu His Phe
                        135
Glu Arg Asp Glu Thr Glu Asn Lys Gly Ser Lys Arg Ser Ile Lys Trp
                                        155
                    150
Phe Thr Glu Phe Leu Gln Ala Asn Gln His Asp Val Ala Lys Phe Trp
                                    170
                165
Ser Asp Ile Ser Glu Leu Val Val Lys Thr Leu Ile Val Ala Glu Pro
                                185
His Val Leu His Ala Tyr Arg Met Cys Arg Pro Gly Gln Pro Pro Gly
                            200
Ser Glu Ser Val Cys Phe Glu Val Leu Gly Phe Asp Ile Leu Leu Asp
                        215
Arg Lys Leu Lys Pro Trp Leu Leu Glu Ile Asn Arg Ala Pro Ser Phe
                                        235
                    230
Gly Thr Asp Gln Lys Ile Asp Tyr Asp Val Lys Arg Gly Val Leu Leu
                                    250
                245
Asn Ala Leu Lys Leu Leu Asn Ile Arg Thr Ser Asp Lys Arg Arg Asn
                                265
Leu Ala Lys Gln Lys Ala Glu Ala Gln Arg Arg Leu Tyr Gly Gln Asn
                            280
Ser Ile Lys Arg Leu Leu Pro Gly Ser Ser Asp Trp Glu Gln Gln Arg
                                             300
                        295
His Gln Leu Glu Arg Arg Lys Glu Glu Leu Lys Glu Arg Leu Ala Gln
                                        315
                    310
Val Arg Lys Gln Ile Ser Arg Glu Glu His Glu Asn Arg His Met Gly
                                    330
                325
Asn Tyr Arg Arg Ile Tyr Pro Pro Glu Asp Lys Ala Leu Leu Glu Lys
```

```
350
            340
                                345
Tyr Glu Asn Leu Leu Ala Val Ala Phe Gln Thr Phe Leu Ser Gly Arg
                            360
Ala Ala Ser Phe Gln Arg Glu Leu Asn Asn Pro Leu Lys Arg Met Lys
                                            380
                        375
Glu Glu Asp Ile Leu Asp Leu Leu Glu Gln Cys Glu Ile Asp Asp Glu
                    390
                                        395
Lys Leu Met Gly Lys Thr Thr Lys Thr Arg Gly Pro Lys Pro Leu Cys
                405
Ser Met Pro Glu Ser Thr Glu Ile Met Lys Arg Pro Lys Tyr Cys Ser
                                425
Ser Asp Ser Ser Tyr Asp Ser Ser Ser Ser Ser Glu Ser Asp Glu
                            440
Asn Glu Lys Glu Glu Tyr Gln Asn Lys Lys Arg Glu Lys Gln Val Thr
                       455
                                            460 -
Tyr Asn Leu Lys Pro Ser Asn His Tyr Lys Leu Ile Gln Gln Pro Ser
                    470
                                        475
Ser Ile Arg Arg Ser Val Ser Cys Pro Arg Ser Ile Ser Ala Gln Ser
                485
                                    490
Pro Ser Ser Gly Asp Thr Arg Pro Phe Ser Ala Gln Gln Met Ile Ser
                                505
Val Ser Arg Pro Thr Ser Ala Ser Arg Ser His Ser Leu Asn Pro Gly
                            520
Leu Pro Pro Thr
    530
<210> 2321
<211> 433
<212> DNA
<213> Homo sapiens
<400> 2321
caattgtgtg gacgtgtcta tgtgtgtttc taattctata ctatcttgaa aatggttcag
cgttctagaa atacagccac ataatttttt ttgttttgaa aaactgctca gcaaatgcat
acaggicata atggcaggia acagaccati tattgaagig cigaaacaaa tagaaaacaa
agtocaggac accatcacag agcagtactt coottgtgag atactotcag ctaagtaaga
attgagtgag acaacaataa aacaaatacc cataggcttt tcaaacagta acaacccgct
cagggttagc agcatttcta gaccttgatg gtaaaatgat gttctcaacc tttgctttca
gacactggat cactgcttaa gtagccttta tcttttcccc ctaatttttg ttgaagatgc
cagaggtgga gtg
433
<210> 2322
<211> 105
<212> PRT
<213> Homo sapiens
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<400> 2322
Met Leu Leu Thr Leu Ser Gly Leu Leu Leu Phe Glu Lys Pro Met Gly
Ile Cys Phe Ile Val Val Ser Leu Asn Ser Tyr Leu Ala Glu Ser Ile
                                25
Ser Gln Gly Lys Tyr Cys Ser Val Met Val Ser Trp Thr Leu Phe Ser
Ile Cys Phe Ser Thr Ser Ile Asn Gly Leu Leu Pro Ala Ile Met Thr
                        55
Cys Met His Leu Leu Ser Ser Phe Ser Lys Gln Lys Lys Leu Cys Gly
                    70
Cys Ile Ser Arg Thr Leu Asn His Phe Gln Asp Ser Ile Glu Leu Glu
                                    90
                85
Thr His Ile Asp Thr Ser Thr Gln Leu
            100
<210> 2323
<211> 532
<212> DNA
<213> Homo sapiens
<400> 2323
acgcgtcaaa actggcaaag ctggcggctt agggggaggg gcaagtggac ttggaggccc
tectecactg tgcaccecet tggaaaaaaa geggaggggg cateaagtaa aagtttettg
ccaggcagag ccagctcggc ggccccccgc acatagctgg ggttagcagg ggttgcttct
ctgccgggca cagcgntctc caggagccag ccggggagag ctgagccaag gccgaaggag
ccgcctgcgg gcttagccgc cccctcccgc ccgttggccc cagagcggac gctgggacgc
ccggggtctg gcagctctgc gcccggctag gagcgggcgg gcgagcatta gcctgcgtcc
tggagaaggg gcgcagcgcc gcagttgagg ccgaagcagc ccctcgcggg cgtaggatac
ctgtcagtga gcgcccggat tgcacggccc ccgggtagtg cctgccggcg aggggcggga
getegggtga ettggecate eccateceeg geccaggece ggagggegge eg
532
<210> 2324
<211> 51
<212> PRT
<213> Homo sapiens
<400> 2324
Thr Arg Gln Asn Trp Gln Ser Trp Arg Leu Arg Gly Arg Gly Lys Trp
Thr Trp Arg Pro Ser Ser Thr Val His Pro Leu Gly Lys Lys Ala Glu
                                25
Gly Ala Ser Ser Lys Ser Phe Leu Pro Gly Arg Ala Ser Ser Ala Ala
                                                 45
        35
                            40
Pro Arg Thr
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50

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<210> 2327 <**211**> 599

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Glu Ser Phe Trp Arg Leu Thr Val Phe Phe Val Ser Leu Ser Leu Leu
Gly Val Ile Leu Ile Ala Phe Gln Gln Ala Gln Tyr Ile Leu Met Glu
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Phe Met Lys Thr Arg Gln Arg Gln Asn Ala Ser Ser Ser Gln Gln
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Cys	Lys	Asn 115	Phe	Leu	Asp	Thr	Tyr 120	Gly	Pro	Ser	Asp	Lys 125	Gly	Arg	Gly
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				165					170		Thr			175	
			180					185			Ser		190		
		195					200				Asp	205			
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225					230					235	Lys				240
	_			245					250		Ser			255	
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				485					490					495	Arg
			500					505					510		Asp
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Gln Tyr Ala Glu Pro Ser Cys Pro Ser Leu Pro Ala Gly Pro Thr Gly
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Val Pro Cys Val Ile Gln Glu Ser Ala Pro Val His Asn Ser Phe Ile
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Asp Trp Ser Ala Thr Cys Glu Gly Gln Phe Ser Ser Ala Tyr Cys Pro
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Leu Glu Leu Asn Asp Tyr Asn Ala Phe Pro Glu Glu Asn Met Asn Tyr
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His Asn Ser Gln Ser Thr Trp Asn Thr Pro Pro Asn Met Pro Ala Ala
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Trp Gly His Ala Ser Phe Ile Ser Ser Pro Pro Tyr Leu Thr Ser Thr
                                             700
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Arg Ser Leu Ser Pro Met Ser Gly Leu Phe Gly Ser Ile Trp Ala Pro
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Gln Ser Asp Val Tyr Glu Asn Cys Cys Pro Ile Asn Pro Thr Thr Glu
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His Ser Thr His Met Glu Asn Gln Ala Val Val Cys Lys Glu Tyr Tyr
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Pro Gly Phe Asn Pro Phe Arg Ala Tyr Met Asn Leu Asp Ile Trp Thr
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Gln Phe Arg Lys Asn Gly Leu Pro Tyr Ile Met His Pro Ile Gln Val
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Ala Gly Ile Leu Thr Glu Met Arg Leu Asp Gly Pro Thr Ile Val Ala
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Gly Phe Leu His Asp Val Ile Glu Asp Thr Pro Tyr Thr Phe Glu Asp
Val Lys Glu Met Phe Asn Glu Glu Val Ala Arg Ile Val Asp Gly Val
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Thr Lys Leu Lys Lys Ile Lys Tyr Arg Ser Lys Glu Glu Gln Gln Ala
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Glu Asn His Arg Lys Leu Phe Ile Ala Ile Ala Lys Asp Val Arg
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Leu Arg His Gly Arg Gln Gly Asp His Val Met Ser Pro Thr Val Ser
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Glu Arg Arg Leu Ser Ala Pro Met Arg Arg Gly Ile Val Ala Leu Cys
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Ser Gln Ser Pro Gly Ala Thr Arg His Arg Gln Glu Asp Ser Gly Asp
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Met Ser Asn Val Gly Thr Thr Arg Leu Ser His Met Pro Leu Pro Pro
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Ala Ser Asn Pro Pro Gly Thr Val His Ser Ala Pro Asn Arg Gly Leu
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                    70
Gly Arg Arg Pro Ser Asp Leu Thr Ile Ser Ile Asn Gln Met Gly Ser
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Pro Gly Met Gly His Leu Lys Ser Pro Thr Leu Ser Gln Val His Ser
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Pro Leu Val Thr Ser Pro Ser Ala Asn Leu Lys Ser Pro Gln Thr Pro
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Ser Gln Met Val Pro Leu Pro Ser Ala Asn Pro Pro Gly Pro Leu Lys
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Ser Pro Gln Val Leu Gly Ser Ser Leu Ser Val Arg Ser Pro Thr Gly
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Asp Ala Leu Asp Arg Arg Arg Leu Ala Leu Pro Pro Phe Cys Arg
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Phe Arg Leu Phe Leu Arg Phe Trp Cys Leu Leu Glu Ala Cys Ala Pro
Ala Ser Pro Ala Leu Ser Glu Ser Leu Ala Leu Ser Asp Val Ser Asp
Ser Gln Phe Cys Ser Arg Arg Ser Asp Ser Leu Ser Thr Ile Ala Ile
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Asn Ala Lys Asn Ala Asn Glu Lys Asn Ile Ile Trp Val Asn Tyr Leu
            100
                                105
Leu Ser Asn Pro Glu Tyr Lys Asp Thr Pro Met Asp Ile Ala Gln Leu
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Pro His Leu Pro Glu Lys Thr Ser Glu Ser Ser Glu Thr Ser Asp Ser
Glu Ser Asp Ser Lys Asp Thr Ser Gly Ile Thr Glu Asp Asn Glu Asn
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Ser Lys Xaa Pro Thr Arg Arg Gly Thr Ser Pro Arg Thr Ala Lys Thr
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Ser Leu Asp Ala Asn Gly Arg Gln Thr Thr Leu Asn Pro Tyr Leu Gly
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Ala Thr Pro Val Ala Val Thr Asp Cys Leu Asn Tyr Gly Ser Pro Tyr
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Ala	Val		Cys	Cys	Arg	Val		Pro	Leu	Gln	ьуѕ	605	GIII	Val	Vai
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Phe	. Ile	Tr	Gly	/ Sei	r Leu	a Ala	val	Tyr	Phe	Ala	Ile	Leu	ι Ph∈	Ala	Met
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ggcgaccatc cttgccacca ttaccattgc cgccctagtg ctcacgggct gtaatacggc
ggtgcgccaa acggtgaaga cgaggtttcc cgcaagctca tcaccgtgtg gggtgctgag
ccacaaaacc cactcctgcc agccgacacc aatgaaaccg gcggcacgaa agtcatcacc
qccttqttcq ccqqcctgqt gtattacgac gccgacggca aaacccataa tgatgtggcc
aaatccattg acttcgatgg cgaccgcacc tacacggtga cgctgcggaa aaccagattc
geegaeggta etgaggtgaa ggeecataat tttgtgaaag etgeegea
408
<210> 2358
<211> 98
<212> PRT
<213> Homo sapiens
<400> 2358
Tyr Gly Gly Ala Pro Asn Gly Glu Asp Glu Val Ser Arg Lys Leu Ile
                                    10
Thr Val Trp Gly Ala Glu Pro Gln Asn Pro Leu Leu Pro Ala Asp Thr
                                25
Asn Glu Thr Gly Gly Thr Lys Val Ile Thr Ala Leu Phe Ala Gly Leu
Val Tyr Tyr Asp Ala Asp Gly Lys Thr His Asn Asp Val Ala Lys Ser
```

```
55
    50
Ile Asp Phe Asp Gly Asp Arg Thr Tyr Thr Val Thr Leu Arg Lys Thr
                                        75
                    70
Arg Phe Ala Asp Gly Thr Glu Val Lys Ala His Asn Phe Val Lys Ala
                                    90
                85
Ala Ala
<210> 2359
<211> 324
<212> DNA
<213> Homo sapiens
<400> 2359
aacctgaaca tgttgggatt gagagagccc gaggtgtatg ggtcggaaac attggccgac
gttgagcaga cgtgtcgtga gtacggcgaa gaacttgggc ttgtaattga gtttcagcaa
accaatcacg aagggcaaat gattgaatgg attcaccacg cccgtagaag gattgcgggg
attgtgatca atccaggagc atggacccat acatcggcag ccatccacga tgcgttgatt
gcagccgagg taccggtgat tgaggttcac atctcaaatg tccacaggcg tgaagatttc
aggcattttt cctacgtgtc acgc
324
<210> 2360
<211> 108
<212> PRT
<213> Homo sapiens
<400> 2360
Asn Leu Asn Met Leu Gly Leu Arg Glu Pro Glu Val Tyr Gly Ser Glu
Thr Leu Ala Asp Val Glu Gln Thr Cys Arg Glu Tyr Gly Glu Glu Leu
                                 25
Gly Leu Val Ile Glu Phe Gln Gln Thr Asn His Glu Gly Gln Met Ile
Glu Trp Ile His His Ala Arg Arg Ile Ala Gly Ile Val Ile Asn
                         55
Pro Gly Ala Trp Thr His Thr Ser Ala Ala Ile His Asp Ala Leu Ile
                    70 -
Ala Ala Glu Val Pro Val Ile Glu Val His Ile Ser Asn Val His Arg
                85
Arg Glu Asp Phe Arg His Phe Ser Tyr Val Ser Arg
            100
<210> 2361
<211> 398
<212> DNA
<213> Homo sapiens
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<400> 2361

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tccggatggg actccaacct acttgggggt actgggggtg cagaaagaac gcggccctgt
gtcagggacc ggtatggaag cctcagtagg gctggagccc catcatgccc cttccgagca
gatcaacaca gaccagctgg tcaaggggga cetecatece tgeeetgtee tcaeggaget
gtagggagag tcccaaaggc aggtggtggg gctggggcct ccaacagctg ggtcctctca
tatcacttaa ggcccaacag cacacagtct cccaagtgtg ccaggtgcca caacacggcc
atcccgctct cacageteca eccegeetge etgeetgeca ceatetecae aaacatatge
tgcagctcca cacccgggaa acaccacatg ctcgcttt
398
<210> 2362
<211> 98
<212> PRT
<213> Homo sapiens
<400> 2362
Met Pro Leu Pro Ser Arg Ser Thr Gln Thr Ser Trp Ser Arg Gly Thr
Ser Ile Pro Ala Leu Ser Ser Arg Ser Cys Arg Glu Ser Pro Lys Gly
                                25
Arg Trp Trp Gly Trp Gly Leu Gln Gln Leu Gly Pro Leu Ile Ser Leu
                            40
Lys Ala Gln Gln His Thr Val Ser Gln Val Cys Gln Val Pro Gln His
Gly His Pro Ala Leu Thr Ala Pro Pro Arg Leu Pro Ala Cys His His
                    70
Leu His Lys His Met Leu Gln Leu His Thr Arg Glu Thr Pro His Ala
                                     90
                85
Arg Phe
<210> 2363
<211> 833
<212> DNA
<213> Homo sapiens
<400> 2363
nngactcoto tagotoccaa ogcaaaagog tttaaagatg cagotoagaa goatoaccag
cagcacaagg ggaggtccca agaaccagaa cttacatcac tgcctccgag ttcagaggtt
teettteeca cetteteaga aetttetgtt teeatggeet eetetgeeae etetgeeaee
teccetgatg tgetggeete egtttecate gettecteat ggegttette egeceggtgt
tocaageeca etgeangteg aageaaaegt gattgegtta eeaeteagaa ggtggeaeag
ggactggcag cggtgccatc tgggagtctg tgtgctcagc ctccgagtgc aggcttcccc
360
```

qqcccctqct qtggtgctag gtccccagat gagagatcac ggtcatgaag atcagccccc

```
aaggcagccc cttccnttcc agcctgggct ctggcgtgtt ctaggtgctc acttccatgg
ctggcctgct cacagagccc tacctcagcc tgtggtaagc gcacctgctc ggccctggtg
ctctatgatg agccaccagt cagttctgca gatgtgtccc cgagctcctg ccgagggacg
aaacacggtg gecetgetee tagtgeetgt geacgeeacg etecacacet gecatetgee
cttccaccac ctgctccccc aggggctccg cctcgtgact cacgctcagg caagtctccg
ggcgcgaaca gctggctgat ggtgacatgc tgcagcctgg tcacatcaga aaccatgagg
gtggatetee ggaggteate gatgtggaea gaetgeeaca geeetteaeg egt
                 -
<210> 2364
<211> 135
<212> PRT
<213> Homo sapiens
<400> 2364
Xaa Thr Pro Leu Ala Pro Asn Ala Lys Ala Phe Lys Asp Ala Ala Gln
Lys His His Gln Gln His Lys Gly Arg Ser Gln Glu Pro Glu Leu Thr
                                25
Ser Leu Pro Pro Ser Ser Glu Val Ser Phe Pro Thr Phe Ser Glu Leu
Ser Val Ser Met Ala Ser Ser Ala Thr Ser Ala Thr Ser Pro Asp Val
                        55
Leu Ala Ser Val Ser Ile Ala Ser Ser Trp Arg Ser Ser Ala Arg Cys
                    70
                                        75
Ser Lys Pro Thr Ala Xaa Arg Ser Lys Arg Asp Cys Val Thr Thr Gln
                                    90
Lys Val Ala Gln Gly Leu Ala Ala Val Pro Ser Gly Ser Leu Cys Ala
                                105
Gln Pro Pro Ser Ala Gly Phe Pro Gly Pro Cys Cys Gly Ala Arg Ser
Pro Asp Glu Arg Ser Arg Ser
    130
<210> 2365
<211> 429
<212> DNA
<213> Homo sapiens
<400> 2365
accggtgccc agctcccacg gctcgtccag acctacgttg agaaacttcg acgagacagt
ctccgtcagt tcgcccaaca acctctgaac gaagtcaaga ttctccggca ctggagccaa
ggtgcttgcc ctggcatgaa cgccccaggg gaggtcgacg ccgtcgggat tctcacaccg
```

```
atggtgatgg gactcggttt ccaaccacgg ttccatgtga cccagacagt tctggttggc
cocgageteg atgestegte egegacacag accategage caceteatgt ceteegeegt
caeggggetg eggteggeec acaecteete eteaeegggg taggeaaate eegetteaee
atagagetea aggtgattga gaccacaceg egecatgaeg egegteagga aatcaagagt
ggaacgcgt
429
<210> 2366
<211> 132
<212> PRT
<213> Homo sapiens
<400> 2366
Met Ala Arg Cys Gly Leu Asn His Leu Glu Leu Tyr Gly Glu Ala Gly
Phe Ala Tyr Arg Gly Glu Glu Glu Val Trp Ala Asp Arg Ser Pro Val
Thr Ala Glu Asp Met Arg Trp Leu Asp Gly Leu Cys Arg Gly Arg Gly
                            40
Ile Glu Leu Gly Ala Asn Gln Asn Cys Leu Gly His Met Glu Pro Trp
Leu Glu Thr Glu Ser His His Arg Cys Glu Asn Pro Asp Gly Val
Asp Leu Pro Trp Gly Val His Ala Arg Ala Ser Thr Leu Ala Pro Val
                85
Pro Glu Asn Leu Asp Phe Val Gln Arg Leu Leu Gly Glu Leu Thr Glu
                                105
Thr Val Ser Ser Lys Phe Leu Asn Val Gly Leu Asp Glu Pro Trp Glu
                                                125
Leu Gly Thr Gly
    130
<210> 2367
<211> 474
<212> DNA
<213> Homo sapiens
<400> 2367
ngtgcacggg agaagacgtg cgcgcagttc ggcggaacct atccgggttc ggccggcagt
gggggtcacg agctcaccga cgcgcgcgcg ttcgcctcgt ggggcgtcga tttcgtcaaa
tacgatcggt gctccggtga ctccgcgcac gacgaccagg tcgcctcgtt caccgcgatg
cgtgacgcaa tccgatccac cggacgcccc atggtgtaca gcatcaaccc caacagcgaa
tegeoggate ggteeggage ceaattegat tggggggtg tggcaaccat gacaegtace
accaacgaca tetegeeggt gtggaccaet eggeeggeeg gtgeegatge gacaceggea
360
```

```
teggggtate aggggateeg egacateate gacgeegtgg eecegategg egcacgggtt
gcgacggcag cttcgtcgac atggacatgc tcgtcgtcgg tgtcggcaac gcgt
474
<210> 2368
<211> 158
<212> PRT
<213> Homo sapiens
<400> 2368
Xaa Ala Arg Glu Lys Thr Cys Ala Gln Phe Gly Gly Thr Tyr Pro Gly
Ser Ala Gly Ser Gly Gly His Glu Leu Thr Asp Ala Arg Ala Phe Ala
                                25
Ser Trp Gly Val Asp Phe Val Lys Tyr Asp Arg Cys Ser Gly Asp Ser
Ala His Asp Asp Gln Val Ala Ser Phe Thr Ala Met Arg Asp Ala Ile
Arg Ser Thr Gly Arg Pro Met Val Tyr Ser Ile Asn Pro Asn Ser Glu
Ser Pro Asp Arg Ser Gly Ala Gln Phe Asp Trp Gly Gly Val Ala Thr
                85
Met Thr Arg Thr Thr Asn Asp Ile Ser Pro Val Trp Thr Thr Arg Pro
                                105
Ala Gly Ala Asp Ala Thr Pro Ala Ser Gly Tyr Gln Gly Ile Arg Asp
                            120
Ile Ile Asp Ala Val Ala Pro Ile Gly Ala Arg Val Ala Thr Ala Ala
                        135
Ser Ser Thr Trp Thr Cys Ser Ser Ser Val Ser Ala Thr Arg
                    150
145
<210> 2369
<211> 408
<212> DNA
<213> Homo sapiens
<400> 2369
ctgaatggca ggcaggcaga ggccaccaga gccagccccc cgagaagccc tgctgagcca
aaggggagcg ccctgggacc taacccagag ccccatctca ccttcccccg ttctttcaaa
gtgcctcccc caaccccagt caggacttcg tccatcccag ttcaggaagc acaagaggct
cccgaaagga agaggggcc accaagaagg ctcccagccg actcccactg cctcccagct
tecacateeg eccegeetee caggtetace cagacaggge eccegagene agactgeeet
ggggagetea aggeeacage accageeage ecaaggettg geeagteeca gteecaagea
gatgaacgag ctgggactcc gcctccagcc cctcccctgc cccctcct
```

<210> 2370

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<211> 136
<212> PRT
<213> Homo sapiens
<400> 2370
Leu Asn Gly Arg Gln Ala Glu Ala Thr Arg Ala Ser Pro Pro Arg Ser
Pro Ala Glu Pro Lys Gly Ser Ala Leu Gly Pro Asn Pro Glu Pro His
Leu Thr Phe Pro Arg Ser Phe Lys Val Pro Pro Pro Thr Pro Val Arg
                            40
Thr Ser Ser Ile Pro Val Gln Glu Ala Gln Glu Ala Pro Glu Arg Lys
                        55
Arg Gly Pro Pro Arg Arg Leu Pro Ala Asp Ser His Cys Leu Pro Ala
                                        75
                    70
Ser Thr Ser Ala Pro Pro Pro Arg Ser Thr Gln Thr Gly Pro Pro Ser
Xaa Asp Cys Pro Gly Glu Leu Lys Ala Thr Ala Pro Ala Ser Pro Arg
                                105
Leu Gly Gln Ser Gln Ser Gln Ala Asp Glu Arg Ala Gly Thr Pro Pro
                            120
Pro Ala Pro Pro Leu Pro Pro
    130
<210> 2371
<211> 327
<212> DNA
<213> Homo sapiens
<400> 2371
gaatteggtg tgcgatgcga geetgcagee tgggagcaga gacaaggage aaaggeggtg
agagggttgc cagggcaccc agttacagct ggagctgcag gggacccatc cctcgagaga
ggcaggcact agtcatgagg caagagatgc ctcagaagag gatgctggcc gcagggcaca
gcagagaggg agatagcccg gggcactcct caggaccggg cctcagggga cagcaaacaa
gattcctgat agacgcgccc aggtcatgcc ttttcagtgg tgtgagccag gttctggcgt
caggcgggcc aaggttttca tgcagcn
327
<210> 2372
<211> 104
<212> PRT
<213> Homo sapiens
<400> 2372
Met Arg Ala Cys Ser Leu Gly Ala Glu Thr Arg Ser Lys Gly Glu
Arg Val Ala Arg Ala Pro Ser Tyr Ser Trp Ser Cys Arg Gly Pro Ile
                                25
Pro Arg Glu Arg Gln Ala Leu Val Met Arg Gln Glu Met Pro Gln Lys
```

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35
                                                45
Arg Met Leu Ala Ala Gly His Ser Arg Glu Gly Asp Ser Pro Gly His
Ser Ser Gly Pro Gly Leu Arg Gly Gln Gln Thr Arg Phe Leu Ile Asp
                    70
                                        75
Ala Pro Arg Ser Cys Leu Phe Ser Gly Val Ser Gln Val Leu Ala Ser
                                                        95
                                    90
Gly Gly Pro Arg Phe Ser Cys Ser
            100
<210> 2373
<211> 591
<212> DNA
<213> Homo sapiens
<400> 2373
gaattctgac attcaggaag tcaattgcag aaggtttaac caagttgatt ctgttttacc
aaatcctgtc tattctgaaa agcggccaat gccagactca tctcatgatg tgaaagttct
cacttcaaag acatcagetg ttgagatgac ccaggcagta ttgaatactc agetttcatc
agaaaatgtt accaaagttg agcaaaattc accagcagtt tgtgaaacaa tttctgttcc
caagtccatg tccactgagg aatataaatc aaaaattcaa aatgaaaata tgctacttct
cgctttgctt tcacaggcac gtaagactca gaagacagta ttaaaagatg ctaatcaaac
tattcaggat tctaaaccag acagttgtga aatgaatcca aatacccaaa tgactggtaa
ccaactgaat ttgaagaaca tggaaactcc aagtacttct aatgtaagtg gcagggtttt
ggacaactcc ttttgcagtg gacaagaatc ctcaacaaaa ggaatgcctg ctaaaagtga
caqtaqctqt tccatqqaaq tgctagcaac ctgtctttcc ctgtggaaaa a
591
<210> 2374
<211> 167
<212> PRT
<213> Homo sapiens
<400> 2374
Met Pro Asp Ser Ser His Asp Val Lys Val Leu Thr Ser Lys Thr Ser
                                    10
Ala Val Glu Met Thr Gln Ala Val Leu Asn Thr Gln Leu Ser Ser Glu
Asn Val Thr Lys Val Glu Gln Asn Ser Pro Ala Val Cys Glu Thr Ile
Ser Val Pro Lys Ser Met Ser Thr Glu Glu Tyr Lys Ser Lys Ile Gln
                        55
Asn Glu Asn Met Leu Leu Leu Ala Leu Leu Ser Gln Ala Arg Lys Thr
                    70
Gln Lys Thr Val Leu Lys Asp Ala Asn Gln Thr Ile Gln Asp Ser Lys
```

```
85
                                    90
Pro Asp Ser Cys Glu Met Asn Pro Asn Thr Gln Met Thr Gly Asn Gln
                                105
Leu Asn Leu Lys Asn Met Glu Thr Pro Ser Thr Ser Asn Val Ser Gly
                            120
Arg Val Leu Asp Asn Ser Phe Cys Ser Gly Gln Glu Ser Ser Thr Lys
                        135
Gly Met Pro Ala Lys Ser Asp Ser Ser Cys Ser Met Glu Val Leu Ala
                    150
Thr Cys Leu Ser Leu Trp Lys
                165
<210> 2375
<211> 535
<212> DNA
<213> Homo sapiens
<400> 2375
ntggccatgt cgttgctcag cagcggcacc ctggacagtt accttgagcg tcacaaacaa
ctggacgcga tgcgcatgct gcacttcttc gccctcgacg aagaaaaccc cgccagcatc
tataactgcc tgcgcgccgc gcggggcaat gcccacgcgg tacgcgggcg gatcaccgcc
gacatgtggg aaaacctcaa cgccacctgg ctggaaatgc gcagcatcgc cgccgggggc
ctggcccggc atggcatcag ccacttctgt gactgggtca agcagcgttc gcacctgttc
cgcggggcaa cctcgggcac catcatgcgc aacgacgctt accggtttat tcgcctgggc
acgtttgtcg agcgcgcgga caacaccctg cgcctgctgg atgcgcgcta cgaaatgttt
ggtgaggagt cggaagaggt cagcgacctg tcggcacgcg ggtattacca gtggagcgcc
ctgctgcggg ccttgtcgtc attcgaggcg tataccgaac tgtaccccaa cgcgt
535
<210> 2376
<211> 178
<212> PRT
<213> Homo sapiens
<400> 2376
Xaa Ala Met Ser Leu Leu Ser Ser Gly Thr Leu Asp Ser Tyr Leu Glu
                                    10
Arg His Lys Gln Leu Asp Ala Met Arg Met Leu His Phe Phe Ala Leu
                                25
Asp Glu Glu Asn Pro Ala Ser Ile Tyr Asn Cys Leu Arg Ala Ala Arg
Gly Asn Ala His Ala Val Arg Gly Arg Ile Thr Ala Asp Met Trp Glu
                        55
Asn Leu Asn Ala Thr Trp Leu Glu Met Arg Ser Ile Ala Ala Gly Gly
                                         75
                    70
Leu Ala Arg His Gly Ile Ser His Phe Cys Asp Trp Val Lys Gln Arg
```

```
90
Ser His Leu Phe Arg Gly Ala Thr Ser Gly Thr Ile Met Arg Asn Asp
                                105
Ala Tyr Arg Phe Ile Arg Leu Gly Thr Phe Val Glu Arg Ala Asp Asn
                            120
Thr Leu Arg Leu Leu Asp Ala Arg Tyr Glu Met Phe Gly Glu Glu Ser
                                            140
                        135
Glu Glu Val Ser Asp Leu Ser Ala Arg Gly Tyr Tyr Gln Trp Ser Ala
                                        155
                    150
Leu Leu Arg Ala Leu Ser Ser Phe Glu Ala Tyr Thr Glu Leu Tyr Pro
                                                         175
                165
                                    170
Asn Ala
<210> 2377
<211> 622
<212> DNA
<213> Homo sapiens
<400> 2377
acgcgtgaag ggttgaggct tcagaagtgg tagggaagaa cagaagctcc cttctgaggg
agcacccagg agatgaaagg aaccaatcct gggtggtcct gcaccaggct tatcaacccc
tgacagacaa atggaaaact tctgtgatgg tgggacatga aaaaatattt cacccttctg
ataaaatgga accagcagat agaagtagga atttttctgt taggtgaaat gtttttaaaa
atatqtatac aggaaaaagc ataaaacagt attgactggc aaacatagaa ctggaatgta
aatataatgt totttgooct gaatgattta agtggcatga taaaactcat gocacagact
gggtaagaca aggaatctaa tccactctaa aaagaagaaa agcatagtaa aattctcctt
agagttagaa ttattaatag ttcctatcta ctatttaatt taatcatagt taatgatgag
aatttcttaa atttaaagct tctgatgatg ctaaatgtgc atttctcatg attccttaaa
540
acaatttttg taaattctat tootaggaco ttotgottto agaaaaatta atgtottgta
ttcttcgtat tggaggagat ct
622
<210> 2378
<211> 109
<212> PRT
<213> Homo sapiens
<400> 2378
Met Ser Phe Ile Met Pro Leu Lys Ser Phe Arg Ala Lys Asn Ile Ile
Phe Thr Phe Gln Phe Tyr Val Cys Gln Ser Ile Leu Phe Tyr Ala Phe
                                25
Ser Cys Ile His Ile Phe Lys Asn Ile Ser Pro Asn Arg Lys Ile Pro
```

```
40
                                                45
        35
Thr Ser Ile Cys Trp Phe His Phe Ile Arg Arg Val Lys Tyr Phe Phe
                        55
Met Ser His His Arg Ser Phe Pro Phe Val Cys Gln Gly Leu Ile
                    70
Ser Leu Val Gln Asp His Pro Gly Leu Val Pro Phe Ile Ser Trp Val
                                    90
Leu Pro Gln Lys Gly Ala Ser Val Leu Pro Tyr His Phe
            100
                                105
<210> 2379
<211> 342
<212> DNA
<213> Homo sapiens
<400> 2379
tcatgacctg gagacttcgg aaactcaaca agactgcagg gcacccaggg gcaccagccc
cggtcaccgc agaggatcag tgcactttgc catctggcag atcaactcat ggcacaactg
120
ggaaacataa cattcacgct tgtgaaccga gacgccatac cccagcggtg ccgagagcaa
cagtgctgtg caggtctggg cagatgaggg cctccaggac acgaggactc actcgctcac
cctgcccact gggcagctgc tcgccactcc cctcctggag ggcaggacgg acaccacaca
cacacacaag cagggaagct gtgcagcagt ggggagaaag ca
342
<210> 2380
<211> 113
<212> PRT
<213> Homo sapiens
<400> 2380
Met Thr Trp Arg Leu Arg Lys Leu Asn Lys Thr Alá Gly His Pro Gly
Ala Pro Ala Pro Val Thr Ala Glu Asp Gln Cys Thr Leu Pro Ser Gly
Arg Ser Thr His Gly Thr Thr Gly Lys His Asn Ile His Ala Cys Glu
                            40
Pro Arg Arg His Thr Pro Ala Val Pro Arg Ala Thr Val Leu Cys Arg
                        55
Ser Gly Gln Met Arg Ala Ser Arg Thr Arg Gly Leu Thr Arg Ser Pro
                    70
Cys Pro Leu Gly Ser Cys Ser Pro Leu Pro Ser Trp Arg Ala Gly Arg
                                    90
Thr Pro His Thr His Thr Ser Arg Glu Ala Val Gln Gln Trp Gly Glu
                                105
            100
Ser
```

<210> 2381 <211> 434

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<212> DNA
<213> Homo sapiens
<400> 2381
gtgcaccetg gccatatgga cgccagegae gtcggcgtet tgcgtgaegt ggaaccgate
ggcccaagta gagagatgga ttttgaatgg tgacgatgta cccgccgcag caagtggatg
ccgtcctctt tgacatggac ggaaccctgc tcaacaccct gccggcctgg tgcgtggcat
ctgagcatct gtggggcact tctctggctg acgctgacag cgccaaggtt gacgggggca
ccgtcgacga cgtcgttgag ctgtatctgc gagaccaccc tcaggcagat ccccaggcca
ccatcgagcg tttcatggac atccttgacg ccaacctggc tggccacacc gagccgatgc
ccggagctga ccgcctcgtg aagaggctgt caggtcatgt acccatcgct gtggtgtcga
420
atteccegae gegt
434
<210> 2382
<211> 116
<212> PRT
<213> Homo sapiens
<400> 2382
Met Val Thr Met Tyr Pro Pro Gln Gln Val Asp Ala Val Leu Phe Asp
Met Asp Gly Thr Leu Leu Asn Thr Leu Pro Ala Trp Cys Val Ala Ser
Glu His Leu Trp Gly Thr Ser Leu Ala Asp Ala Asp Ser Ala Lys Val
Asp Gly Gly Thr Val Asp Asp Val Val Glu Leu Tyr Leu Arg Asp His
                                             60
Pro Gln Ala Asp Pro Gln Ala Thr Ile Glu Arg Phe Met Asp Ile Leu
                                        75
                    70
Asp Ala Asn Leu Ala Gly His Thr Glu Pro Met Pro Gly Ala Asp Arg
                                    90
Leu Val Lys Arg Leu Ser Gly His Val Pro Ile Ala Val Val Ser Asn
                                105
Ser Pro Thr Arg
        115
<210> 2383
<211> 393
<212> DNA
<213> Homo sapiens
<400> 2383
acgcgtgcgt tcagatgagc gccggacgaa actcctcggt cgcttcggca ggcatggatt
catgtcggca cgggcctttg aacaggatcg ccgtcgcgtg gctatccgcc gcgggtgggg
```

cagaaaacgc ccactctccc ttccccaggc gccggccgtc gagtcgtcta cgcaacgcac gtctacatag gtgacttttt cataccccca ctttcgtact cggatgggct cggcgtgctc gatgtcggca cgaaaaatta aatgcactga atgcgggttg tcgcacagga tgcatctcgt ctttcttgat gccacccacc ttgttacata ttctgccatg caaaacacct tgtgattttt ggcggagtgc aacatggtat gtgtatgcca ctg 393 , <210> 2384 <211> 125 <212> PRT <213> Homo sapiens <400> 2384 Met Leu His Ser Ala Lys Asn His Lys Val Phe Cys Met Ala Glu Tyr Val Thr Arg Trp Val Ala Ser Arg Lys Thr Arg Cys Ile Leu Cys Asp Asn Pro His Ser Val His Leu Ile Phe Arg Ala Asp Ile Glu His Ala 40 Glu Pro Ile Arg Val Arg Lys Trp Gly Tyr Glu Lys Val Thr Tyr Val Asp Val Arg Cys Val Asp Asp Ser Thr Ala Gly Ala Trp Gly Arg Glu Ser Gly Arg Phe Leu Pro His Pro Arg Arg Ile Ala Thr Arg Arg Arg. 90 Ser Cys Ser Lys Ala Arg Ala Asp Met Asn Pro Cys Leu Pro Lys Arg 105 Pro Arg Ser Phe Val Arg Arg Ser Ser Glu Arg Thr Arg 125 115 120 <210> 2385 <211> 347 <212> DNA <213> Homo sapiens <400> 2385 acgcgttccc aaagtaggat ggctgggata gagggaaagg acatctttca ggcttgttat geactgtget gtggaetett gttgtggggt cetaggtetg eccageattt tggggtteae cccgtgaccc tctacgggtt tccatgcccc cagcaccacg tccatcatca tttctggggt cccctcacct cagagagect getteetatg actgegtggg ccagetggag aaggaegace caagacccct caagtttctg tgtcctgacc ccaagcatag gcctgagtgc tcctggggcc caagggcctt tacgcactac tctctggggc ccactgtctg cactctt

<210> 2386

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<211> 109
<212> PRT
<213> Homo sapiens
<400> 2386
Met Ala Gly Ile Glu Gly Lys Asp Ile Phe Gln Ala Cys Tyr Ala Leu
Cys Cys Gly Leu Leu Trp Gly Pro Arg Ser Ala Gln His Phe Gly
Val His Pro Val Thr Leu Tyr Gly Phe Pro Cys Pro Gln His His Val
His His His Phe Trp Gly Pro Leu Thr Ser Glu Ser Leu Leu Pro Met
                        55
Thr Ala Trp Ala Ser Trp Arg Arg Thr Thr Gln Asp Pro Ser Ser Phe
                    70
Cys Val Leu Thr Pro Ser Ile Gly Leu Ser Ala Pro Gly Ala Gln Gly
Pro Leu Arg Thr Thr Leu Trp Gly Pro Leu Ser Ala Leu
            100
<210> 2387
<211> 715
<212> DNA
<213> Homo sapiens
<400> 2387
neggeegeae tteacettae ggagggaga taatgagate aattagagge geegteaeeg
cgccggagac agctgccgcc gcatagtaat cacccgcggg ctgggtgcgc gggggctccc
cgctacctgc gcgcctgctg ctcccaccac gcggcaccga cccgggcgcg cccccggccc
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<210> 2388
<211> 58
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<213> Homo sapiens <400> 2388 Met Gly Met Ser Val His Gly Val Cys Leu Glu Met Gly Glu Cys Arg Leu Glu Cys Ala Gly Val Ala Arg Val Trp Ala Gln Ile Asp Ala Cys Val Ile Thr Cys Cys Val Arg Val Cys Thr Ser Cys Ala Cys Val Ser Val Phe Glu Cys Leu Gln Glu Cys Gly Trp 50 <210> 2389 <211> 336 <212> DNA <213> Homo sapiens <400> 2389 ntcaccetge egeeggaagg ttgetegtac egeatggeea tegteaceat gaagaagteg tatccgggcc acgccaagcg cgtcatgttg ggtgtctggt cgtttttgcg acagttcatg tataccaagt togttatogt caccgacgac gatatcaacg cocgcgactg gaacgacgtg atctgggcca tcaccacgcg catggacccc aagcgcgaca cggtgatgat cgataacacg ccgatcgact acctcgactt cgcctcgccg gtgtccggcc tgggttcgaa gatggggctc gateceaege acaaatggee eggeeaeaee aceegn 336 <210> 2390 <211> 112 <212> PRT <213> Homo sapiens <400> 2390 Xaa Thr Leu Pro Pro Glu Gly Cys Ser Tyr Arg Met Ala Ile Val Thr Met Lys Lys Ser Tyr Pro Gly His Ala Lys Arg Val Met Leu Gly Val Trp Ser Phe Leu Arg Gln Phe Met Tyr Thr Lys Phe Val Ile Val Thr Asp Asp Asp Ile Asn Ala Arg Asp Trp Asn Asp Val Ile Trp Ala Ile 55 Thr Thr Arg Met Asp Pro Lys Arg Asp Thr Val Met Ile Asp Asn Thr 75 Pro Ile Asp Tyr Leu Asp Phe Ala Ser Pro Val Ser Gly Leu Gly Ser 90 Lys Met Gly Leu Asp Pro Thr His Lys Trp Pro Gly His Thr Thr Arg 105

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Leu Pro Val Val Asp Glu Asp Gly Thr Leu Met Gly Ile Cys Thr Thr
Arg Asp Met Arg Phe Glu Pro Asp Phe Asp Arg Lys Val Ser Glu Val
                                        75
Met Thr Ala Met Pro Leu Val Val Ala Arg Glu Gly Val Ser Lys Lys
Glu Ala Leu Glu Leu Leu Ser Ala Asn Lys Val Glu Lys Leu Pro Ile
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Val Asp Ala Asp Asn Lys Leu Thr Gly Leu Ile Thr Val Lys Asp Phe
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Val Lys Thr Glu Gln Tyr Pro Asn Ala
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360
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362
<210> 2396
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Gln Asp Lys Asp Ser Lys Trp Ser Gln Leu Gln Leu Met Ser Lys Lys
                            40
Ser Lys Ile Phe Gly Lys Tyr Asp Asp Ile Gly Pro Ala Leu Leu Leu
Asn Ala Gln Ser Pro Gly Lys Gly Gln Ile Asn Ile Ala Lys Leu Val
Val Asp Glu Ser Gln Pro Pro Met Arg Arg Ala Val Leu Leu Gly His
                                    90
Leu Asp Met Thr Lys Val Glu Asn Met Gln Ile Leu Asn Thr Leu Ala
            100
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Asn Ser Ser Glu Ser
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<212> DNA
<213> Homo sapiens
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agggaaaccc gtactctgac ctgggtaacc ataccacatg caggtatcgt gatttccgat
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ccaagetgge ttttateatt gteatggage aegteateta etetgtgaaa ttttteattt
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449
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<211> 76
<212> PRT
<213> Homo sapiens
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                                     10
Thr Pro Trp Lys Gly Thr Ser Thr Thr Leu Ser Pro Ser Ser Lys Ser
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Gln Thr Ser Lys Thr Lys Ala Arg Glu Thr Arg Thr Leu Thr Trp Val
Thr Ile Pro His Ala Gly Ile Val Ile Ser Asp Thr His Leu Asp Thr
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Pro Arg Ser Ile Asn Thr Thr Ser Thr Ile Gly Met
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<212> DNA
<213> Homo sapiens
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gtttctgacg atcgagcgcc tggccatgtc aggggaactt tcgggtaaag aacaggaact
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344
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<211> 112
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<213> Homo sapiens
<400> 2400
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His Asn Leu Tyr Phe Glu Arg Val Ala Pro Val Glu Ile Met Glu Phe
Val Ala Tyr Cys Leu Gln Phe Leu Thr Ile Glu Arg Leu Ala Met Ser
Gly Glu Leu Ser Gly Lys Glu Gln Glu Leu Val Lys Pro Phe Ala Gly
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Pro Ala Arg Leu Gly Gly Val Arg Lys Pro Thr Thr Pro Gln Asn Gly
                                         75
Ser Ser Thr Gly Phe Ile Asn Ser Leu Lys Ser Arg Gln Val Lys Asn
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Ser Ile Pro Tyr Gly Leu Arg Cys Asp Thr Arg Ser Gly Trp Ile Gly
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<400> 2401

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<211> 159
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Ser Gly Arg Cys Trp Met Phe Ala Ala Leu Asn Val Phe Arg His Arg
Ala Ala Lys Glu Leu Asn Ile Asp Asp Phe Glu Phe Ser Phe Thr Tyr
Leu Gln Tyr Phe Asp Lys Leu Glu Arg Ala Asn Phe Ala Leu Asn Gln
Leu Leu Asp Leu Thr Glu Asp Gly Thr Asp Trp Asp Asp Arg Asp Val
                                        75
                    70
Ala Thr Ser Leu Glu Leu Thr Gly Asp Asp Gly Gly Trp Trp Ser Phe
Phe Thr Asn Leu Val Asp Lys Tyr Gly Ala Val Pro Ala Glu Val Met
Pro Glu Val His Ser Ser Gly His Thr Asp Gln Met Asn Arg Asp Ile
Ala Thr Ile Ile Arg Arg Ala Ala His Arg Ala Val Glu Gly Glu Gly
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tteetcaage geetggacee gaagaagtae accgaegaaa cetteggtgt geegaecate
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<213> Homo sapiens
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Ala Tyr Pro Leu Val Gln Arg Ile Ala Ala Glu Thr Gly Arg Asp Ile
Arg Ser Leu Ile Gly Asp Ala Ala Phe Leu Lys Arg Leu Asp Pro Lys
Lys Tyr Thr Asp Glu Thr Phe Gly Val Pro Thr Ile Thr Asp Ile Leu
                        55
Gln Glu Leu Glu Lys Pro Gly Arg Asp Pro Arg Pro Glu Phe Lys Thr
Ala Glu Phe Gln Asp Gly Val Glu Asp Leu Lys Asp Leu Gln Pro Gly
Met Ile Leu Glu Gly Val Val Thr Asn Val Thr Asn Phe Gly Ala Phe
                                105
Val Asp Ile Gly Val His Gln Asp Gly Leu Val His Ile Ser Ala Leu
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                            120
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ctcactccac atttcactac aaaccaagga aagctccctc atggaccgac atctggtgag
cetteatete teccetggea atgeetggee acetgaeace tggeetecet cetettteea
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ctgctatagg ctcgctgcac tccccctgca ggtgctgggg acaccgcaac cctcctcctg
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660
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Pro Pro Asp Thr Trp Pro Pro Ser Ser Phe Gln Gln Ser Trp Tyr Gln
                                25
Arg Met Ala His His Pro Pro Gln Cys Pro Asp Arg Pro Ala
Phe Leu Pro Ser His Ser Pro Lys Ser Lys Pro Leu Phe Ile Leu Pro
                        55
Pro Ile Leu Leu Thr Asn Phe Phe His Arg Arg Leu Trp Leu Ile
                    70
Gly Leu Thr Glu Ala Gln Gly Ser Val Ser Val Leu Arg Ala Leu Gln
                                    90
                85
Val Ala Ala Pro Cys Ala Gln Ser Gln Ala Pro Cys Tyr Arg Leu Ala
                                105
Ala Leu Pro Leu Gln Val Leu Gly Thr Pro Gln Pro Ser Ser Trp Gly
His Leu Leu Ala Phe Ala Gly Pro Arg Gly Ser Leu Leu Pro Gly Ser
Arg Leu Trp Val Arg
145
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Gln Tyr Ala Lys Arg Met Val Gly Arg Arg Met Phe Gly Gly Ser Thr
Thr Tyr Ile Pro Leu Lys Val Asn Gln Ser Gly Val Ile Pro Val Ile
                        55
Phe Ala Ser Ser Ile Leu Tyr Leu Pro Val Leu Tyr Ala Thr Phe Arg
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                                        75
Pro Gln Thr Ser Ala Ala Lys Trp Ile Gly His Tyr Phe Thr Arg Gly
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Asp His Pro Val Tyr
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322
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<213> Homo sapiens <400> 2410 Met Val Ser Ser Pro His Cys Val Ser Pro Glu Ser Asn Trp Arg Pro Ser Asp Thr Thr Ser Arg Pro Asn Arg Arg Gly Ser Arg Asn Ser Asp Cys Gly Asn Cys Leu Gln Phe Ser Ser Gly Gln Met Thr Leu Pro Arg Leu Pro Arg Pro Trp Pro Lys Gly Ser Arg Gly Leu Gly Pro Thr Ala 55 Asp Ala Arg Thr Leu Thr Pro Asp Ala Ser Glu Ala Ser Arg Trp Ala 75 Leu Arg Gly Leu Leu Trp Leu Cys Ser Cys Trp Leu Gly Trp Gly Ser 90 Asp Leu Val Arg Asp Met Ser Val Ser Val 105 100 <210> 2411 <211> 371 <212> DNA <213> Homo sapiens <400> 2411 ccatgggctg ggtgctggag acacgagatc aggcaggccc tgcccctggg gctcattcta qqqtctqcqq cagacaggga gacagaggga gctgtgagag ccctgaggct gagtggcttt ctggggaagc accateceta gggaecteeg egtteggtea gtggeegetg etgteggtgt gcagagcaga ggctgggggg agagtggtca gcaggcctgc tggtggcagc ttgtgcagga aqqqaqqatq qaqqttggct tgtggctggc aagagggtgg catgcacgtc gctgaaaggc aggcctgggc ccgaggcctg ggtgtgggga cgcctgagga gactgtacag tgtggagtcg ggggggctgc g 371 <210> 2412 <211> 123 <212> PRT <213> Homo sapiens <400> 2412 Met Gly Trp Val Leu Glu Thr Arg Asp Gln Ala Gly Pro Ala Pro Gly Ala His Ser Arg Val Cys Gly Arg Gln Gly Asp Arg Gly Ser Cys Glu Ser Pro Glu Ala Glu Trp Leu Ser Gly Glu Ala Pro Ser Leu Gly Thr

60

35 40 45 Ser Ala Phe Gly Gln Trp Pro Leu Leu Ser Val Cys Arg Ala Glu Ala

Gly Ala Arg Val Val Ser Arg Pro Ala Gly Gly Ser Leu Cys Arg Lys

55

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80
                    70
65
Gly Gly Trp Arg Leu Ala Cys Gly Trp Gln Glu Gly Gly Met His Val
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Glu Thr Val Gln Cys Gly Val Gly Gly Ala Ala
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Thr Cys Gly Leu Trp Val His Ser Pro Gln Trp Gln Asn Leu Gln Ser
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40
        35
His Ile Cys Trp Ala Glu Pro Ala Trp His Glu Gln Gly Phe Ser Leu
Leu Trp Pro Pro Leu Phe Asn Thr Val Leu Leu Ser Lys Asn Trp Leu
Gly Gly Ala Gly Pro Pro Cys Asn Leu Gln Ala Cys His Leu Val Val
                                    90
Ser Phe Cys Ser Ala Ala Ser Gln Gly Phe Ser Ala Pro Gly Ala Gly
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Trp Trp Gly Pro Ala Leu Leu Arg Leu Ile Arg Lys Asp Ala Leu His
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Gly Lys Ser Ser Pro Gln Pro Pro Val
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1020
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His Ile Phe Ser Ala Gly Ile Thr Trp Gly Lys Val Val Ser Leu Tyr
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Ala Met Val His Ala Leu Val Asp Cys Leu Gly Glu Phe Val Arg Lys
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Thr Leu Ala Thr Trp Leu Arg Arg Gly Gly Trp Thr Asp Val Leu
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Lys Cys Val Val Ser Thr Asp Pro Gly Leu Arg Ser His Trp Leu Val
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75

Asp Pro Ser Ala Ala Gly Arg Lys Lys Gln Arg His Gly Glu Ala

Val Val Pro Pro Arg Ser Leu Phe Asp Arg Ala Thr Pro Gly Leu Leu

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Asp Cys Lys Ser Lys Gly Pro Arg Trp Ala Ser Val Asn Leu Gly Ile
Phe Ile Cys Met Thr Cys Ser Gly Ile His Arg Ser Leu Gly Val His
Ile Ser Lys Val Arg Ser Ala Thr Leu Asp Thr Trp Leu Pro Glu Gln
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Val Ala Phe Ile Gln Ser Met Gly Asn Glu Lys Ala Asn Ser Tyr Trp
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Val His Glu Leu Asp Gly Thr Gly Asp Ala Asp Pro Arg Ala Ala Glu
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Leu Ala Glu Arg Ala Arg Gln Met Ser Tyr Asp Leu Thr Asp Leu Ala
Ala Ser Val Ala Gly His Ala Ala Arg Ala Glu Ala Asp Pro Gln Arg
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Leu Glu Glu Leu Gly Gly Arg Leu Ala Ala Ile Gln Arg Leu Leu Arg
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Asp Ile Ala Thr Thr Ile Glu Leu Leu Lys Glu Leu Gly Ala Thr Ala
Thr Gln Thr Gln His Cys Val His Ile Asn Ala Lys Glu Val Lys Asn
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Tyr Thr Ala Ser Tyr Glu Leu Val Arg Ser Met Arg Ala Ser Ile Leu
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Ala Leu Gly Pro Leu Val Ala Arg Phe Gly Glu Ala
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240
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Phe Ala Gln Ser Ala Arg Pro Leu Leu Ser Leu Met Ser Pro Asp
Trp Ala Phe Ile Val Pro Cys Thr Glu Ala Ser Leu Ser Pro Arg Ser
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Cys Leu Phe Gly Arg Gly Ser Thr Asn Gly Ser Thr Leu Pro Pro Thr
                                    90
Pro Thr Ala Arg Pro Ala Gly Pro Val Val Gln Leu Glu Lys Ala Arg
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240
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Glu Met Pro Met Tyr Gly Phe Gly Pro Met Pro Gln Pro Asp Leu Arg
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gaaatgacgg 4020	ccgggcatgg	tggctcatgc	ctgtaatccc	agcactttga	gaggccgatg

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			260					265					270		
Gly	Leu	Gly	Glu	Gly	Val	Pro	Ser	Ser	Gln	Arg	Gly		Arg	Arg	Leu
		275					280					285			
Ser	Ala	Glu	Gly	Gly	Asp	Lys	Ala	Leu	His	Lys	Met	Gly	Pro	Gly	Gly
	290					295					300				
Gly	Lys	Ala	Lys	Ala	Leu	Gly	Gly	Ala	Gly	Ser	Gly	Ser	Lys	Gly	Ser
305					310					315					320
Ala	Gly	Gly	Gly	Ser	Lys	Arg	Arg	Leu	Ser	Ser	Glu	Asp	Ser	Ser	Leu
	•	•	•	325	•	_	Ū		330					335	
Glu	Pro	Asp	Leu		Glu	Met	Ser	Leu	Asp	Asp	Ser	Ser	Leu	Ala	Leu
			340					345		•			350		
Glv	Ala	Glu		Sar	Thr	Dhe	Glv		Phe	Pro	Glu	Ser	Pro	Pro	Pro
GLY	ALG	355	AIU	JCI	****	1110	360	01,				365			
C	Pro		nia'	C3.4	C1.	e 0 =		G1v	Dro	Car	Thr		T.e.ii	Pro	Glu
Cys		Leu	HIS	GIÅ	Gry		Arg	GIY	FLO	361	380	riic	Deu	110	014
_	370	_		_	-1	375		<b>01</b>	<b>~</b> 1	17- 1		Dha	Com	C1	c1
	Pro	Asp	Thr	Tyr		GIU	Asp	GIY	GIY		TYL	Pile	Ser	GIU	
385	_				390				_	395	_,		_		400
Pro	Glu	Pro	Pro		Ala	Ser	Val	Gly		Pro	GIY	Leu	Leu		GIÀ
				405					410			_		415	
Asp	Val	Cys	Thr	Gln	Asp	Asp	Leu	Pro	Ser	Thr	Asp	Glu		Gly	Asn
			420					425					430		
Gly	Leu	Pro	Lys	Thr	Lys	Glu	Ala	Ala	Pro	Ala	Val	Gly	Glu	Glu	Asp
		435					440					445			
Asp	Asp	Tyr	Gln	Ala	Tyr	Tyr	Leu	Asn	Ala	Gln	Asp	Gly	Ala	Gly	Gly
	450	-				455					460				
Glu	Glu	Glu	Lys	Ala	Glu	Gly	Gly	Ala	Gly	Glu	Glu	His	Asp	Leu	Phe
465			•		470	•	-		_	475			_		480
	Gly	Leu	Lvs	Pro	Leu	Glu	Gln	Glu	Ser	Arq	Met	Glu	Val	Leu	Phe
	1														
			-						490	•				495	
Δla	Cvs			485					490					495	
Ala	Cys		Glu	485				His	490				Glu	495	
•	-	Ala	Glu 500	485 Ala	Leu	His	Ala	His 505	490 Gly	Tyŗ	Ser	Ser	Glu 510	495 Ala	Ser
•	Cys Leu	Ala Thr	Glu 500	485 Ala	Leu	His	Ala Gln	His 505	490 Gly	Tyŗ	Ser	Ser Asn	Glu 510	495 Ala	Ser
Arg	Leu	Ala Thr 515	Glu 500 Val	485 Ala Glu	Leu Leu	His Ala	Ala Gln 520	His 505 Asp	490 Gly Leu	Tyŗ	Ser Ala	Ser Asn 525	Glu 510 Pro	495 Ala Pro	Ser Asp
Arg	Leu Lys	Ala Thr 515	Glu 500 Val	485 Ala Glu	Leu Leu	His Ala Lys	Ala Gln 520	His 505 Asp	490 Gly Leu	Tyŗ	Ser Ala Arg	Ser Asn 525	Glu 510 Pro	495 Ala Pro	Ser Asp
Arg Leu	Leu Lys 530	Ala Thr 515 Gly	Glu 500 Val Lys	485 Ala Glu Lys	Leu Leu Asn	His Ala Lys 535	Ala Gln 520 Val	His 505 Asp Ser	490 Gly Leu Thr	Tyr Leu Ser	Ser Ala Arg 540	Ser Asn 525 Gln	Glu 510 Pro Thr	495 Ala Pro Trp	Ser Asp Val
Arg Leu Ala	Leu Lys	Ala Thr 515 Gly	Glu 500 Val Lys	485 Ala Glu Lys	Leu Leu Asn Ser	His Ala Lys 535	Ala Gln 520 Val	His 505 Asp Ser	490 Gly Leu Thr	Tyr Leu Ser Leu	Ser Ala Arg 540	Ser Asn 525 Gln	Glu 510 Pro Thr	495 Ala Pro Trp	Ser Asp Val Ser
Arg Leu Ala 545	Leu Lys 530 Thr	Ala Thr 515 Gly Asn	Glu 500 Val Lys Thr	485 Ala Glu Lys Leu	Leu Leu Asn Ser 550	His Ala Lys 535 Lys	Ala Gln 520 Val	His 505 Asp Ser	490 Gly Leu Thr	Tyr Leu Ser Leu 555	Ser Ala Arg 540 Leu	Ser Asn 525 Gln Thr	Glu 510 Pro Thr	495 Ala Pro Trp Leu	Ser Asp Val Ser 560
Arg Leu Ala 545	Leu Lys 530	Ala Thr 515 Gly Asn	Glu 500 Val Lys Thr	485 Ala Glu Lys Leu Arg	Leu Leu Asn Ser 550	His Ala Lys 535 Lys	Ala Gln 520 Val	His 505 Asp Ser	490 Gly Leu Thr Phe	Tyr Leu Ser Leu 555	Ser Ala Arg 540 Leu	Ser Asn 525 Gln Thr	Glu 510 Pro Thr	495 Ala Pro Trp Leu Phe	Ser Asp Val Ser 560
Arg Leu Ala 545 Glu	Leu Lys 530 Thr	Ala Thr 515 Gly Asn Pro	Glu 500 Val Lys Thr	485 Ala Glu Lys Leu Arg 565	Leu Leu Asn Ser 550	His Ala Lys 535 Lys Asn	Ala Gln 520 Val Ala Leu	His 505 Asp Ser Ala Ala	490 Gly Leu Thr Phe Phe 570	Tyr Leu Ser Leu 555 Arg	Ser Ala Arg 540 Leu Val	Ser Asn 525 Gln Thr	Glu 510 Pro Thr Val Met	495 Ala Pro Trp Leu Phe 575	Ser Asp Val Ser 560 Ala
Arg Leu Ala 545 Glu	Leu Lys 530 Thr	Ala Thr 515 Gly Asn Pro	Glu 500 Val Lys Thr Glu	485 Ala Glu Lys Leu Arg 565	Leu Leu Asn Ser 550	His Ala Lys 535 Lys Asn	Ala Gln 520 Val Ala Leu	His 505 Asp Ser Ala Ala Ser	490 Gly Leu Thr Phe Phe 570	Tyr Leu Ser Leu 555 Arg	Ser Ala Arg 540 Leu Val	Ser Asn 525 Gln Thr	Glu 510 Pro Thr Val Met	495 Ala Pro Trp Leu Phe 575	Ser Asp Val Ser 560 Ala
Arg Leu Ala 545 Glu Leu	Leu Lys 530 Thr Arg	Ala Thr 515 Gly Asn Pro Leu	Glu 500 Val Lys Thr Glu Gln 580	485 Ala Glu Lys Leu Arg 565 Arg	Leu Leu Asn Ser 550 His	His Ala Lys 535 Lys Asn	Ala Gln 520 Val Ala Leu	His 505 Asp Ser Ala Ala Ser 585	490 Gly Leu Thr Phe Phe 570 Thr	Tyr Leu Ser Leu 555 Arg	Ser Ala Arg 540 Leu Val	Ser Asn 525 Gln Thr Gly Leu	Glu 510 Pro Thr Val Met Glu 590	A95 Ala Pro Trp Leu Phe 575 Val	Ser Asp Val Ser 560 Ala
Arg Leu Ala 545 Glu Leu	Leu Lys 530 Thr	Ala Thr 515 Gly Asn Pro Leu	Glu 500 Val Lys Thr Glu Gln 580	485 Ala Glu Lys Leu Arg 565 Arg	Leu Leu Asn Ser 550 His	His Ala Lys 535 Lys Asn	Ala Gln 520 Val Ala Leu Ala Val	His 505 Asp Ser Ala Ala Ser 585	490 Gly Leu Thr Phe Phe 570 Thr	Tyr Leu Ser Leu 555 Arg	Ser Ala Arg 540 Leu Val	Ser Asn 525 Gln Thr Gly Leu Lys	Glu 510 Pro Thr Val Met Glu 590	A95 Ala Pro Trp Leu Phe 575 Val	Ser Asp Val Ser 560 Ala
Arg Leu Ala 545 Glu Leu Leu	Leu Lys 530 Thr Arg Glu	Ala Thr 515 Gly Asn Pro Leu Tyr 595	Glu 500 Val Lys Thr Glu Gln 580 Gln	485 Ala Glu Lys Leu Arg 565 Arg	Leu Asn Ser 550 His Pro Ser	His Ala Lys 535 Lys Asn Pro Glu	Ala Gln 520 Val Ala Leu Ala Val 600	His 505 Asp Ser Ala Ala Ser 585 Ala	490 Gly Leu Thr Phe 570 Thr	Tyr Leu Ser Leu 555 Arg Lys Leu	Ser Ala Arg 540 Leu Val Ala Leu	Ser Asn 525 Gln Thr Gly Leu Lys 605	Glu 510 Pro Thr Val Met Glu 590 Lys	A95 Ala Pro Trp Leu Phe 575 Val	Ser Asp Val Ser 560 Ala Lys Pro
Arg Leu Ala 545 Glu Leu Leu	Leu Lys 530 Thr Arg	Ala Thr 515 Gly Asn Pro Leu Tyr 595	Glu 500 Val Lys Thr Glu Gln 580 Gln	485 Ala Glu Lys Leu Arg 565 Arg	Leu Asn Ser 550 His Pro Ser	His Ala Lys 535 Lys Asn Pro Glu	Ala Gln 520 Val Ala Leu Ala Val 600	His 505 Asp Ser Ala Ala Ser 585 Ala	490 Gly Leu Thr Phe 570 Thr	Tyr Leu Ser Leu 555 Arg Lys Leu	Ser Ala Arg 540 Leu Val Ala Leu	Ser Asn 525 Gln Thr Gly Leu Lys 605	Glu 510 Pro Thr Val Met Glu 590 Lys	A95 Ala Pro Trp Leu Phe 575 Val	Ser Asp Val Ser 560 Ala Lys Pro
Arg Leu Ala 545 Glu Leu Leu	Leu Lys 530 Thr Arg Glu	Ala Thr 515 Gly Asn Pro Leu Tyr 595	Glu 500 Val Lys Thr Glu Gln 580 Gln	485 Ala Glu Lys Leu Arg 565 Arg	Leu Leu Asn Ser 550 His Pro Ser	His Ala Lys 535 Lys Asn Pro Glu	Ala Gln 520 Val Ala Leu Ala Val 600	His 505 Asp Ser Ala Ala Ser 585 Ala	490 Gly Leu Thr Phe 570 Thr	Tyr Leu Ser Leu 555 Arg Lys Leu	Ser Ala Arg 540 Leu Val Ala Leu	Ser Asn 525 Gln Thr Gly Leu Lys 605	Glu 510 Pro Thr Val Met Glu 590 Lys	A95 Ala Pro Trp Leu Phe 575 Val	Ser Asp Val Ser 560 Ala Lys Pro
Arg Leu Ala 545 Glu Leu Leu Leu	Leu Lys 530 Thr Arg Glu Ala Gly	Ala Thr 515 Gly Asn Pro Leu Tyr 595 Pro	Glu 500 Val Lys Thr Glu Gln 580 Gln Ser	485 Ala Glu Lys Leu Arg 565 Arg Glu Glu	Leu Leu Asn Ser 550 His Pro Ser Met	His Ala Lys 535 Lys Asn Pro Glu Ser 615	Ala Gln 520 Val Ala Leu Ala Val 600 Thr	His 505 Asp Ser Ala Ala Ser 585 Ala Met	490 Gly Leu Thr Phe 570 Thr Ala Arg	Tyr Leu Ser Leu 555 Arg Lys Leu Cys	Ser Ala Arg 540 Leu Val Ala Leu Arg 620	Asn 525 Gln Thr Gly Leu Lys 605 Ala	Glu 510 Pro Thr Val Met Glu 590 Lys	A95 Ala Pro Trp Leu Phe 575 Val Ile Glu	Ser Asp Val Ser 560 Ala Lys Pro Leu
Arg Leu Ala 545 Glu Leu Leu Leu	Leu Lys 530 Thr Arg Glu Ala Gly 610	Ala Thr 515 Gly Asn Pro Leu Tyr 595 Pro	Glu 500 Val Lys Thr Glu Gln 580 Gln Ser	485 Ala Glu Lys Leu Arg 565 Arg Glu Glu	Leu Leu Asn Ser 550 His Pro Ser Met	His Ala Lys 535 Lys Asn Pro Glu Ser 615	Ala Gln 520 Val Ala Leu Ala Val 600 Thr	His 505 Asp Ser Ala Ala Ser 585 Ala Met	490 Gly Leu Thr Phe 570 Thr Ala Arg	Tyr Leu Ser Leu 555 Arg Lys Leu Cys	Ser Ala Arg 540 Leu Val Ala Leu Arg 620	Asn 525 Gln Thr Gly Leu Lys 605 Ala	Glu 510 Pro Thr Val Met Glu 590 Lys	A95 Ala Pro Trp Leu Phe 575 Val Ile Glu	Ser Asp Val Ser 560 Ala Lys Pro Leu
Arg Leu Ala 545 Glu Leu Leu Leu Arg 625	Leu Lys 530 Thr Arg Glu Ala Gly 610 Glu	Ala Thr 515 Gly Asn Pro Leu Tyr 595 Pro Gly	Glu 500 Val Lys Thr Glu Gln 580 Gln Ser	485 Ala Glu Lys Leu Arg 565 Arg Glu Glu Leu	Leu Leu Asn Ser 550 His Pro Ser Met Cys 630	His Ala Lys 535 Lys Asn Pro Glu Ser 615 Asp	Ala Gln 520 Val Ala Leu Ala Val 600 Thr	His 505 Asp Ser Ala Ala Ser 585 Ala Met Arg	490 Gly Leu Thr Phe 570 Thr Ala Arg	Tyr Leu Ser Leu 555 Arg Lys Leu Cys Val 635	Ser Ala Arg 540 Leu Val Ala Leu Arg 620 Leu	Ser Asn 525 Gln Thr Gly Leu Lys 605 Ala	Glu 510 Pro Thr Val Met Glu 590 Lys Glu Leu	A95 Ala Pro Trp Leu Phe 575 Val Ile Glu Met	Ser Asp Val Ser 560 Ala Lys Pro Leu 640
Arg Leu Ala 545 Glu Leu Leu Leu Arg 625	Leu Lys 530 Thr Arg Glu Ala Gly 610	Ala Thr 515 Gly Asn Pro Leu Tyr 595 Pro Gly	Glu 500 Val Lys Thr Glu Gln 580 Gln Ser	485 Ala Glu Lys Leu Arg 565 Arg Glu Glu Leu	Leu Leu Asn Ser 550 His Pro Ser Met Cys 630	His Ala Lys 535 Lys Asn Pro Glu Ser 615 Asp	Ala Gln 520 Val Ala Leu Ala Val 600 Thr	His 505 Asp Ser Ala Ala Ser 585 Ala Met Arg	490 Gly Leu Thr Phe 570 Thr Ala Arg	Tyr Leu Ser Leu 555 Arg Lys Leu Cys Val 635	Ser Ala Arg 540 Leu Val Ala Leu Arg 620 Leu	Ser Asn 525 Gln Thr Gly Leu Lys 605 Ala	Glu 510 Pro Thr Val Met Glu 590 Lys Glu Leu	A95 Ala Pro Trp Leu Phe 575 Val Ile Glu Met	Ser Asp Val Ser 560 Ala Lys Pro Leu 640
Arg Leu Ala 545 Glu Leu Leu Leu Arg 625 Ala	Leu Lys 530 Thr Arg Glu Ala Gly 610 Glu Ser	Ala Thr 515 Gly Asn Pro Leu Tyr 595 Pro Gly Phe	Glu 500 Val Lys Thr Glu Gln 580 Gln Ser Thr	485 Ala Glu Lys Leu Arg 565 Arg Glu Glu Leu Phe 645	Leu Asn Ser 550 His Pro Ser Met Cys 630 Asp	His Ala Lys 535 Lys Asn Pro Glu Ser 615 Asp	Ala Gln 520 Val Ala Leu Ala Val 600 Thr Tyr Leu	His 505 Asp Ser Ala Ala Ser 585 Ala Met Arg Cys	490 Gly Leu Thr Phe Phe 570 Thr Ala Arg Pro Ala 650	Leu Ser Leu 555 Arg Lys Leu Cys Val 635 Pro	Ser Ala Arg 540 Leu Val Ala Leu Arg 620 Leu Val	Ser Asn 525 Gln Thr Gly Leu Lys 605 Ala Pro Val	Glu 510 Pro Thr Val Met Glu 590 Lys Glu Leu Ser	A95 Ala Pro Trp Leu Phe 575 Val Ile Glu Met Pro 655	Ser Asp Val Ser 560 Ala Lys Pro Leu 640 Thr
Arg Leu Ala 545 Glu Leu Leu Leu Arg 625 Ala	Leu Lys 530 Thr Arg Glu Ala Gly 610 Glu	Ala Thr 515 Gly Asn Pro Leu Tyr 595 Pro Gly Phe	Glu 500 Val Lys Thr Glu Gln 580 Gln Ser Thr Ile	485 Ala Glu Lys Leu Arg 565 Arg Glu Glu Leu Phe 645	Leu Asn Ser 550 His Pro Ser Met Cys 630 Asp	His Ala Lys 535 Lys Asn Pro Glu Ser 615 Asp	Ala Gln 520 Val Ala Leu Ala Val 600 Thr Tyr Leu	His 505 Asp Ser Ala Ala Ser 585 Ala Met Arg Cys	490 Gly Leu Thr Phe Phe 570 Thr Ala Arg Pro Ala 650	Tyr Leu Ser Leu S55 Arg Lys Leu Cys Val 635 Pro	Ser Ala Arg 540 Leu Val Ala Leu Arg 620 Leu Val	Ser Asn 525 Gln Thr Gly Leu Lys 605 Ala Pro Val	Glu 510 Pro Thr Val Met Glu 590 Lys Glu Leu Ser	A95 Ala Pro Trp Leu Phe 575 Val Ile Glu Met Pro 655	Ser Asp Val Ser 560 Ala Lys Pro Leu 640 Thr
Arg Leu Ala 545 Glu Leu Leu Leu Arg 625 Ala Gly	Leu Lys 530 Thr Arg Glu Ala Gly 610 Glu Ser Ser	Ala Thr 515 Gly Asn Pro Leu Tyr 595 Pro Gly Phe Arg	Glu 500 Val Lys Thr Glu Gln 580 Gln Ser Thr Ile Pro 660	485 Ala Glu Lys Leu Arg 565 Arg Glu Glu Leu Phe 645 Pro	Leu Asn Ser 550 His Pro Ser Met Cys 630 Asp Ser	His Ala Lys 535 Lys Asn Pro Glu Ser 615 Asp Val Arg	Ala Gln 520 Val Ala Leu Ala Val 600 Thr Tyr Leu Asn	His 505 Asp Ser Ala Ala Ser 585 Ala Met Arg Cys Trp 665	490 Gly Leu Thr Phe 570 Thr Ala Arg Pro Ala 650 Asn	Leu Ser Leu 555 Arg Lys Leu Cys Val 635 Pro	Ser Ala Arg 540 Leu Val Ala Leu Arg 620 Leu Val Glu	Ser Asn 525 Gln Thr Gly Leu Lys 605 Ala Pro Val Thr	Glu 510 Pro Thr Val Met Glu 590 Lys Glu Leu Ser Pro 670	A95 Ala Pro Trp Leu Phe 575 Val Ile Glu Met Pro 655 Gly	Ser Asp Val Ser 560 Ala Lys Pro Leu 640 Thr
Arg Leu Ala 545 Glu Leu Leu Leu Arg 625 Ala Gly	Leu Lys 530 Thr Arg Glu Ala Gly 610 Glu Ser	Ala Thr 515 Gly Asn Pro Leu Tyr 595 Pro Gly Phe Arg Leu	Glu 500 Val Lys Thr Glu Gln 580 Gln Ser Thr Ile Pro 660	485 Ala Glu Lys Leu Arg 565 Arg Glu Glu Leu Phe 645 Pro	Leu Asn Ser 550 His Pro Ser Met Cys 630 Asp Ser	His Ala Lys 535 Lys Asn Pro Glu Ser 615 Asp Val Arg	Ala Gln 520 Val Ala Leu Ala Val 600 Thr Tyr Leu Asn Ala	His 505 Asp Ser Ala Ala Ser 585 Ala Met Arg Cys Trp 665	490 Gly Leu Thr Phe 570 Thr Ala Arg Pro Ala 650 Asn	Leu Ser Leu 555 Arg Lys Leu Cys Val 635 Pro	Ser Ala Arg 540 Leu Val Ala Leu Arg 620 Leu Val Glu	Ser Asn 525 Gln Thr Gly Leu Lys 605 Ala Pro Val Thr Gly	Glu 510 Pro Thr Val Met Glu 590 Lys Glu Leu Ser Pro 670	A95 Ala Pro Trp Leu Phe 575 Val Ile Glu Met Pro 655 Gly	Ser Asp Val Ser 560 Ala Lys Pro Leu 640 Thr
Arg Leu Ala 545 Glu Leu Leu Leu Arg 625 Ala Gly Glu	Leu Lys 530 Thr Arg Glu Ala Gly 610 Glu Ser Ser	Ala Thr 515 Gly Asn Pro Leu Tyr 595 Pro Gly Phe Arg Leu 675	Glu 500 Val Lys Thr Glu Gln 580 Gln Ser Thr Ile Pro 660 Gly	485 Ala Glu Lys Leu Arg 565 Arg Glu Glu Leu Phe 645 Pro	Leu Asn Ser 550 His Pro Ser Met Cys 630 Asp Ser Glu	His Ala Lys 535 Lys Asn Pro Glu Ser 615 Asp Val Arg Ala	Ala Gln 520 Val Ala Leu Ala Val 600 Thr Tyr Leu Asn Ala 680	His 505 Asp Ser Ala Ala Ser 585 Ala Met Arg Cys Trp 665 Val	490 Gly Leu Thr Phe 570 Thr Ala Arg Pro Ala 650 Asn	Tyr Leu Ser Leu 555 Arg Lys Leu Cys Val 635 Pro Ser Ala	Ser Ala Arg 540 Leu Val Ala Leu Arg 620 Leu Val Glu Leu	Ser Asn 525 Gln Thr Gly Leu Lys 605 Ala Pro Val Thr Gly 685	Glu 510 Pro Thr Val Met Glu 590 Lys Glu Leu Ser Pro 670 Met	A95 Ala Pro Trp Leu Phe 575 Val Ile Glu Met Pro 655 Gly Lys	Ser Asp Val Ser 560 Ala Lys Pro Leu 640 Thr Asp

Sys   Clu   Asp   Leu   Ala   Leu   Ala   Leu   Met   Ile   Thr   Tyr   Lys   Asp   Asp   705   710   715   720   720   735		c 0 0					co÷					700				
705	~1	690	<b>~1.</b>	7.00	T on	7 l a	695	. ה ה	T 011	Mot	Tla	700	Т	TVC	Λcn	λen
Gln Ala Lys Leu Lys Lys Ile Leu Asp Lys Lys Leu Leu Asp Arg Glu Ser 735  Gln Thr His Lys Pro Gln Thr Leu Ser Ser Phe Tyr Ser Ser Ser Arg 755  Thr Thr Ala Ser Gln Arg Ser Pro Ser Lys His Gly Gly Pro Ser Ala Pro Gly Ala Leu Gln Pro Leu Thr Ser Gly Ser Ala Gly Pro Ala 775  Gln Pro Gly Ala Leu Gln Pro Leu Thr Ser Gly Ser Ala Gly Pro Ala 770  Gln Pro Gly Ser Val Ala Gly Ala Gly Pro Gly Pro Thr Glu Gly Phe 805  Thr Glu Lys Asn Val Pro Glu Ser Ser Pro His Ser Pro Cys Glu Gly Pro Thr Glu Lys Asn Val Pro Glu Ser Ser Pro His Ser Pro Cys Glu Gly Roy 820  Ser Arg Leu Ala Leu Gly Ser Arg Gly Gly Tyr Asn Gly Arg Gly Tro 820  Ser Arg Leu Ala Leu Gly Ser Arg Gly Gly Tyr Asn Gly Arg Gly Tro 820  Ser Ser Ser Gly Arg Pro Lys Lys Lys His Thr Gly Met Ala Ser Ile 850  Asp Ser Ser Ala Pro Glu Thr Thr Ser Asp Ser Ser Pro Thr Leu Ser 850  Arg Arg Pro Leu Arg Gly Gly Trp Ala Pro Thr Ser Trp Gly Arg Gly 885  Gln Asp Ser Ser Ala Pro Glu Thr Thr Ser Asp Ser Ser Pro Thr Leu Ser 865  Arg Arg Pro Leu Arg Gly Gly Trp Ala Pro Thr Ser Trp Gly Arg Gly 885  Gln Asp Ser Ser Gly Ser Arg Arg Arg Ala Ser Ner Ser Ser Ser Ser Ser Ser Ser Ser Ser S		гуѕ	GIY	ASP	Leu		reu	AIA	Leu	Mec		1111	ıyı	цуз	мэр	_
Table   Tabl		Δla	Lve	T.e.11	Lvs		Tle	T.e.i	Acn	Lvs		Leu	Δen	Δτα	Glu	
Second Fig.   Color	0111	714	Lys	Dea	_	Lys		<u> </u>	пор			200	мор			552
Table   Tabl	Gln	Thr	His	Lvs		Gln	Thr	Leu	Ser		Phe	Tvr	Ser	Ser		Ara
Pro Thr Thr Ala Ser Gln Arg Ser Pro Ser Lys His Gly Gly Pro Ser 755	· · · ·			-		· · · ·						-1-				5
755	Pro	Thr	Thr		Ser	Gln	Ara	Ser		Ser	Lvs	His	Glv		Pro	Ser
Ala Pro Gly Ala Leu Gln Pro Leu Thr Ser Gly Ser Ala Gly Pro Ala 170							9				-1-		-	,		7. 7 -
770	Ala	Pro		Ala	Leu	Gln	Pro		Thr	Ser	Glv	Ser		Gly	Pro	Ala
Simple   S			1								1			4		
785	Gln		Glv	Ser	Val	Ala	Gly	Ala	Gly	Pro	Gly	Pro	Thr	Glu	Gly	Phe
Leu   Pro   Ser   Glu   Ala   Ala   Leu   The   Pro   Arg   Pro   Glu   Gly   Lys   Val   Pro   820   820   825   830   830   825   830			•				•		•						-	
Leu   Pro   Ser   Glu   Ala   Ala   Leu   The   Pro   Arg   Pro   Glu   Gly   Lys   Val   Pro   820   820   825   830   830   825   830	Thr	Glu	Lys	Asn	Val	Pro	Glu	Ser	Ser	Pro	His	Ser	Pro	Cys	Glu	Gly
Ser Arg Leu Ala Leu Gly Ser Arg Gly Gly Tyr Asn Gly Arg Cly Trp 835			•													
Ser Arg Leu Ala Leu Gly Ser Arg Gly Gly Tyr Asn Gly Arg Gly Trp 835	Leu	Pro	Ser	Glu	Ala	Ala	Leu	Thr	Pro	Arg	Pro	Glu	Gly	Lys	Val	Pro
Ser   Ser   Gly   Arg   Pro   Lys   Lys   Lys   Lys   His   Thr   Gly   Ers   Ala   Ser   Ile   Ser   Ser   Ser   Gly   Arg   Pro   Lys   Lys   Lys   Lys   His   Thr   Gly   Glo   Glo   Glo   Ser   Ser   Ser   Ser   Ala   Pro   Glu   Thr   Thr   Ser   Asp   Ser   Ser   Pro   Thr   Leu   Ser   Ser   Arg   Arg   Arg   Arg   Gly   Gly   Gly   Trp   Ala   Pro   Thr   Ser   Asp   Ser   Gly   Arg   Gly   Ser   Ser   Ser   Ser   Ser   Ser   Ser   Ser   Gly   Ser				820					825					830		
Ser	Ser	Arg	Leu	Ala	Leu	Gly	Ser	Arg	Gly	Gly	Tyr	Asn	Gly	Arg	Gly	Trp
So			835					840					845			
Asp Ser Ser Ala Pro Glu Thr Thr Ser Asp Ser Ser Pro Thr Leu Ser 865   870   87	Gly	Ser	Ser	Gly	Arg	Pro	Lys	Lys	Lys	His	Thr	Gly	Met	Ala	Ser	Ile
865		850					855					860				
Arg Arg Pro Leu Arg Gly Gly Trp Ala Pro Thr Ser Trp Gly Arg Gly 885  Gln Asp Ser Asp Ser Ile Ser Ser Ser Ser Ser Asp Ser Leu Gly Ser 905  Ser Ser Ser Ser Gly Ser Arg Arg Arg Ala Ser Ala Ser Gly Gly Ala Arg 915  Ala Lys Thr Val Glu Val Gly Arg Tyr Lys Gly Arg Arg Pro Glu Ser 930  His Ala Pro His Val Pro Asn Gln Pro Ser Glu Ala Ala Ala His Phe 945  Tyr Phe Glu Leu Ala Lys Thr Val Leu Ile Lys Ala Gly Gly Ass Ser 965  Ser Thr Ser Ile Phe Thr His Pro Ser Ser Ser Gly Gly His Gln Gly 986  Pro His Arg Asn Leu His Leu Cys Ala Phe Glu Ile Gly Leu Tyr Ala 995  Leu Gly Leu His Asn Phe Val Ser Pro Asn Trp Leu Ser Arg Thr Tyr 1010  Ser Ser His Val Ser Trp Ile Thr Gly Gln Ala Met Glu Ile Gly Ser 1035  Pro Glu Val Ala Ser Leu Ala Ala Ala Ala Ser Arg Ala Ser Pro Asn Trp Leu Ser Arg Thr Pro 1045  Pro Glu Val Ala Ser Leu Ala Asp Arg Ala Ser Arg Ala Ser Cys Leu Pro His 1075  Ala His Ala Leu Asn Pro Asn Glu Ile Gln Arg Ala Leu Val Gln Cys Trp Asp Gly His Leu Tyr Ala 1055  Ala His Ala Leu Asn Pro Asn Glu Ile Gln Arg Ala Leu Val Gln Cys Trp Asp Gly His Leu Thr Pro 1065  Ala His Ala Leu Asn Pro Asn Glu Ile Gln Arg Ala Leu Val Gln Cys Trp Asp Gly His Leu Thr Pro 1065  Ala His Ala Leu Asn Pro Asn Glu Ile Gln Arg Ala Leu Val Gln Cys 1095  Lys Glu Gln Asp Asn Leu Met Leu Glu Lys Ala Cys Met Ala Val Glu Cys Glu Gln Asp Asn Leu Met Leu Glu Lys Ala Cys Met Ala Val Glu Cys Glu Gln Asp Asn Leu Met Leu Glu Lys Ala Cys Met Ala Val Glu 1105	Asp	Ser	Ser	Ala	Pro	Glu	Thr	Thr	Ser	Asp	Ser	Ser	Pro	Thr	Leu	Ser
Ser																
Ser   Asp   Ser   Asp   Ser	Arg	Arg	Pro	Leu	Arg	Gly	Gly	Trp	Ala		Thr	Ser	Trp	Gly		Gly
Ser Ser Ser Ser Ser Gly Ser Arg Arg Ala Ser Ala Ser Gly Gly Ala Arg 920													_	_		_
Ser Ser Ser Ser Ser Ser Gly Ser Arg Arg Ala Ser Ala Ser Gly Gly Ala Arg 915	Gln	Asp	Ser	-	Ser	Ile	Ser	Ser		Ser	Ser	Asp	Ser		GIY	Ser
Ala Lys Thr Val Glu Val Gly Arg Tyr Lys Gly Arg Arg Pro Glu Ser 930		_				_	_			_		_	~3			<b>-</b>
Ala Lys Thr Val Glu Val Gly Arg Tyr Lys Gly Arg Arg Pro Glu Ser 930	Ser	Ser		Ser	Gly	Ser	Arg		Ala	Ser	Ala	Ser		GIY	Ala	Arg
His Ala Pro His Val Pro Asn Gln Pro Ser Glu Ala Ala Ala His Phe 945		_					~1				<b>~1</b>			D	a1	
His Ala Pro His Val Pro Asn Gln Pro Ser Glu Ala Ala Ala Ala His Phe 945	Ala	-	Thr	Val	GIU	vai		Arg	Tyr	ràs	GIY		Arg	Pro	GIU	ser
945	***		D	TT-: -	11- 3	D	-	C1 -	Dwa	C	<b>~1</b>		. ה	212	uia	Dho
Tyr Phe Glu Leu Ala Lys Thr Val Leu Ile Lys Ala Gly Gly Asn Ser 965		Ala	PIO	HIS	vai		ASII	GIII	PIO	Ser		мта	MIA	MIA	nis	
Ser Thr Ser Ile Phe Thr His Pro Ser Ser Ser Gly Gly His Gln Gly 980	-	Dho	C111	T 011	ת ז ת		Thr	Val	Lou	Tla		Δla	Glv	Glv	Δen	
Ser Thr Ser Ile Phe Thr His Pro Ser Ser Ser Gly Gly His Gln Gly 980	ıyı	FIIC	GIU	Leu		цуз	1111	Val	neu		Бур	AIG	Gry	G <sub>1</sub>		JCI
Pro His Arg Asn Leu His Leu Cys Ala Phe Glu Ile Gly Leu Tyr Ala 995       1000	Ser	Thr	Ser	Tle		Thr	His	Pro	Ser		Ser	Glv	Glv	His		Glv
Pro His Arg Asn Leu His Leu Cys Ala Phe Glu Ile Gly Leu Tyr Ala 995	Jer	1111	JCI		TIIC	1111		110			001	<b>-</b> 1	017			0-7
Leu Gly Leu His Asn Phe Val Ser Pro Asn Trp Leu Ser Arg Thr Tyr 1010  Ser Ser His Val Ser Trp Ile Thr Gly Gln Ala Met Glu Ile Gly Ser 1025  Ala Ala Leu Thr Ile Leu Val Glu Cys Trp Asp Gly His Leu Thr Pro 1045  Pro Glu Val Ala Ser Leu Ala Asp Arg Ala Ser Arg Asp Ser 1066  Asn Met Val Arg Ala Ala Ala Ala Glu Leu Ala Leu Ser Cys Leu Pro His 1075  Ala His Ala Leu Asn Pro Asn Glu Ile Gln Arg Ala Leu Val Gln Cys 1090  Lys Glu Gln Asp Asn Leu Met Leu Glu Lys Ala Cys Met Ala Val Glu Glu 1105	Pro	His	Ara		Leu	His	Leu	Cvs		Phe	Glu	Ile	Glv		Tvr	Ala
Leu Gly Leu His Asn Phe Val Ser Pro Asn Trp Leu Ser Arg Thr Tyr 1010  Ser Ser His Val Ser Trp Ile Thr Gly Gln Ala Met Glu Ile Gly Ser 1025  Ala Ala Leu Thr Ile Leu Val Glu Cys Trp Asp Gly His Leu Thr Pro 1045  Pro Glu Val Ala Ser Leu Ala Asp Arg Ala Ser Arg Ala Arg Asp Ser 1060  Asn Met Val Arg Ala Ala Ala Glu Leu Ala Leu Ser Cys Leu Pro His 1075  Ala His Ala Leu Asn Pro Asn Glu Ile Gln Arg Ala Leu Val Gln Cys 1090  Lys Glu Gln Asp Asn Leu Met Leu Glu Lys Ala Cys Met Ala Val Glu 1105  Leu Glu Cys Ala Cys Met Ala Val Glu 1110  Lys Glu Gln Asp Asn Leu Met Leu Glu Lys Ala Cys Met Ala Val Glu 11105			_					-					-		•	
Ser Ser His Val Ser Trp Ile Thr Gly Gln Ala Met Glu Ile Gly Ser  1025  Ala Ala Leu Thr Ile Leu Val Glu Cys Trp Asp Gly His Leu Thr Pro  1040  Pro Glu Val Ala Ser Leu Ala Asp Arg Ala Ser Arg Ala Arg Asp Ser  1075  Asn Met Val Arg Ala Ala Ala Ala Glu Leu Ala Leu Ser Cys Leu Pro His  1075  Ala His Ala Leu Asn Pro Asn Glu Ile Gln Arg Ala Leu Val Gln Cys  1090  Lys Glu Gln Asp Asn Leu Met Leu Glu Lys Ala Cys Met Ala Val Glu  1105  1110  1110  1115  1025  1035  1040  1040  1040  1040  1055  1065  1075  1085  1075  1080  1	Leu	Gly		His	Asn	Phe	Val			Asn	Trp	Leu	Ser	Arg	Thr	Tyr
1025											-			_		_
1025	Ser	Ser	His	Val	Ser	Trp	Ile	Thr	Gly	Gln	Ala	Met	Glu	Ile	Gly	Ser
Pro Glu Val Ala Ser Leu Ala Asp Arg Ala Ser Arg Ala Arg Asp Ser $1060$									_							
Pro Glu Val Ala Ser Leu Ala Asp Arg Ala Ser Arg Ala Arg Asp Ser 1060 1065 1070  Asn Met Val Arg Ala Ala Ala Ala Glu Leu Ala Leu Ser Cys Leu Pro His 1075 1080 1085  Ala His Ala Leu Asn Pro Asn Glu Ile Gln Arg Ala Leu Val Gln Cys 1090 1090 1095 1100  Lys Glu Gln Asp Asn Leu Met Leu Glu Lys Ala Cys Met Ala Val Glu 1105 1110 1115 1120	Ala	Ala	Leu	Thr	Ile	Leu	Val	Glu	Cys	Trp	Asp	Gly	His	Leu	Thr	Pro
Asn Met Val Arg Ala Ala Ala Glu Leu Ala Leu Ser Cys Leu Pro His 1075					1045	5				1050	כ				105	5
Asn Met Val Arg Ala Ala Ala Glu Leu Ala Leu Ser Cys Leu Pro His 1075  Ala His Ala Leu Asn Pro Asn Glu Ile Gln Arg Ala Leu Val Gln Cys 1090  Lys Glu Gln Asp Asn Leu Met Leu Glu Lys Ala Cys Met Ala Val Glu 1105  1110  1120	Pro	Glu	Val	Ala	Ser	Leu	Ala	Asp	Arg	Ala	Ser	Arg	Ala	Arg	Asp	Ser
1075   1080   1085   1085   1085   1086   1090   1090   1095   1100   1105   1110   1115   1110   1115   1110   1085				1060	)				106	5				1070	)	
Ala His Ala Leu Asn Pro Asn Glu Ile Gln Arg Ala Leu Val Gln Cys 1090 1095 1100  Lys Glu Gln Asp Asn Leu Met Leu Glu Lys Ala Cys Met Ala Val Glu 1105 1110 1115 1120	Asn	Met	Val	Arg	Ala	Ala	Ala	Glu	Leu	Ala	Leu	Ser	Cys	Leu	Pro	His
1090 1095 1100 Lys Glu Gln Asp Asn Leu Met Leu Glu Lys Ala Cys Met Ala Val Glu 1105 1110 1115 1120			1075	5				1080	)				1085	5		
Lys Glu Gln Asp Asn Leu Met Leu Glu Lys Ala Cys Met Ala Val Glu 1105 1110 1115 1120	Ala	His	Ala	Leu	Asn	Pro	Asn	$\operatorname{Glu}$	Ile	${\tt Gln}$	Arg	Ala	Leu	Val	Gln	Cys
1105 1110 1115 1120																
	Lys	Glu	Gln	Asp	Asn	Leu	Met	Leu	Glu	Lys	Ala	Cys	Met	Ala	Val	Glu
Glu Ala Ala Lys Gly Gly Gly Val Tyr Pro Glu Val Leu Phe Glu Val																
	Glu	Ala	Ala	Lys	Gly	Gly	Gly	Val	Tyr	Pro	Glu	Val	Leu	Phe	Glu	Val

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1125
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Ala His Gln Trp Phe Trp Leu Tyr Glu Gln Thr Ala Gly Gly Ser Ser
                                1145
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Thr Ala Arg Glu Gly Ala Thr Ser Cys Ser Ala Ser Gly Ile Arg Ala
       1155
                            1160
Gly Gly Glu Ala Gly Arg Gly Met Pro Glu Gly Arg Gly Pro Gly
                                            1180
                        1175
Thr Glu Pro Val Thr Val Ala Ala Ala Ala Val Thr Ala Ala Ala Thr
                    1190
                                        1195
Val Val Pro Val Ile Ser Val Gly Ser Ser Leu Tyr Pro Gly Pro Gly
                1205
                                    1210
Leu Gly His Gly His Ser Pro Gly Leu His Pro Tyr Thr Ala Leu Gln
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            1220
Pro His Leu Pro Cys Ser Pro Gln Tyr Leu Thr His Pro Ala His Pro
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        1235
Ala His Pro Met Pro His Met Pro Arg Pro Ala Val Phe Pro Val Pro
                        1255
Ser Ser Ala Tyr Pro Gln Val Arg Pro Val Phe Cys Trp Gly Val Arg
                                        1275
1265
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Glu Tyr Asn Trp Ser Val Gly Glu Ser Trp
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qatqcctccg accttttgga tcctctttct gcacctctca ggggacaggt cccgtctgta
eggegetgee taegagaaac ecaagtteat taetgeagee aaaggaaagg tgeaggeggt
600
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ggcctgtgcc cagcagttcc ggaagcagac ccaggcccag gtgtacagtg aggacatggc
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720

cctgaacata 780	ggctcggaac	cagaaggcct	gcaggtggaa	gagaaggagc	gccctgtgca
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cageetetee 900	aaggccagag	tgcagacacc	tgcggttgtt	gccgattcag	ggaagtcgaa
gggcaaagac 960	aaggagagga	aaacgtccac	aggacaacac	agcacagtcc	agcctgaggt
tgccgataag 1020	atagtcctgg	tcacagacag	acatctcctg	gagctgccac	tggaaggtct
ctctgtgttc 1080	gatgaaggga	caatttcctc	tgtgtcacga	gaattttctc	ttcaaatgct
gtggaatcgc 1140	ctccataaag	aagagacaga	aggtggcgtg	aaaaaggagg	gaagaagcag
agaccccaaa 1200	aagagaagcc	tagcgaagaa	gggcaggaag	ggcagcatcc	cccggaccat
cccccctgac 1260	tgcatcatag	tcgactcaga	caacttcaag	ttegtegtgg	acccatacga
ggaggcccag 1320	ggcccagaaa	tgctaactcc	tgtctccatc	acccaagaca	ttttggaaag
1380		cgcgatgggc			
ccaggcccag 1440	tgggagcagg	ccctgggcag	ctgcagcggt	ttcttcttct	atggaatgga
gagetteetg 1500	tcccatatat	tagtggagag	attggtcgcc	atgaacttgc	aagagtgcca
ggtggcagtc 1560	ctgctggacc	tggcacggtc	ctaccagagc	ttgaagaggc	acatggagag
cgtggagcac 1620	aggagatctg	ttggccgttg	ggaagccaat	tggagaaacg	gtgcgtctcc
1680		gaggcggtga			
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atgggctgcc 1800	gcaccaagcc	atcgggtagt	gcaggcctgg	acctgcctcc	catcagctgc
tggggcccca 1860	gcacttgcct	ctgcccttgg	ctctgcccct	ctgccaaccc	atccccacct
cccggctccc 1920	atccccagct	cccagctcgc	tctccccttc	etgggeetet	ccccagccct
tggtgcagcc ·1980	tcagccaggg	accetecece	agcgacttcc	cgcaaggcag	ccgcctggac
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ccagaagact 2160	attcagaccg	tgagcctgtt	tttgatttga	gtgttccact	aaacaaacaa
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aaaaaaaaa 2244	aaaaaaaaa	aaaa			

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Pro Ile Ser Cys Trp Gly Pro Ser Thr Cys Leu Cys Pro Trp Leu Cys
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Pro Ser Ala Asn Pro Ser Pro Pro Pro Gly Ser His Pro Gln Leu Pro
                           40
Ala Arg Ser Pro Leu Pro Gly Pro Leu Pro Ser Pro Trp Cys Ser Leu
                       55
Ser Gln Gly Pro Ser Pro Ser Asp Phe Pro Gln Gly Ser Arg Leu Asp
                                      75
Leu Glu Leu Cys Leu Pro Val Cys Ala Met Gly Ser Ala Ser Gly Leu
                                   90
Glu Leu Arg Leu Phe Pro Gly Pro Gly Gln Gly Arg Pro Pro Leu Gly
           100
                               105
Gly Ala Gly Ala Glu Leu Leu Arg Pro Glu Asp Tyr Ser Asp Arg Glu
                           120
Pro Val Phe Asp Leu Ser Val Pro Leu Asn Lys Gln Gln Lys Pro Lys
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155
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Lys Lys Lys Lys Lys Lys Lys
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qtccatttqa cqaaaaacqa atttttaatt qtqcaqactt tgtttacgca ccccaataag
180
atctatacgc gcgatgaaat tatcgaagtc accttcggaa tggattatga ggcctttgac
cgtgccattg atacccatat caaaaacatt cgccagaaga ttgaagcgga tccgaaaaac
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360
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361
<210> 2444
<211> 120
<212> PRT
<213> Homo sapiens
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Xaa Val Arg Ala Ile Leu Arg Arg Thr Pro Ser Arg Glu Asp Glu Lys

<400> 2444

Met Leu Gln Thr Ala Asp Gly Arg Leu Arg Ile Asp Ile Glu Ser Met Arg Thr Phe Val Glu Gly Lys Glu Val His Leu Thr Lys Asn Glu Phe Leu Ile Val Gln Thr Leu Phe Thr His Pro Asn Lys Ile Tyr Thr Arg 55 Asp Glu Ile Ile Glu Val Thr Phe Gly Met Asp Tyr Glu Ala Phe Asp 75 70 Arg Ala Ile Asp Thr His Ile Lys Asn Ile Arg Gln Lys Ile Glu Ala 85 90 Asp Pro Lys Asn Pro Val Tyr Ile Arg Thr Val Tyr Gly Val Gly Tyr Leu Pro Gly Gly Phe Asp Glu Ala <210> 2445 <211> 403 <212> DNA <213> Homo sapiens <400> 2445 agatotqttq aatgaagcag qtqccactta qacattcact toactqacto caaccacaac ctcccttca tttgatatcc tgctcttggc agaaggatgg agaaagagca tcgcacaaag aggaagcatg tttatcctgt tcagattact gcttctgcca ggctgctgct gctgttgggt tetgeacatt tgetetttat taageaaatg teagagetgg gtgetggeaa gggaateece tgtatttaca caggtaaacc tgagagccaq agggccccaa accatcctgg ctgcgaggga caagctatta gagttaataa cagtgcactg gcattccttc aaaatcctaa tggaagcata aataaaaaga ggaaagtccc ctttacccaa gaacctgaaa aan 403 <210> 2446 <211> 102 <212> PRT <213> Homo sapiens <400> 2446 Met Glu Lys Glu His Arg Thr Lys Arg Lys His Val Tyr Pro Val Gln Ile Thr Ala Ser Ala Arg Leu Leu Leu Leu Gly Ser Ala His Leu 25 Leu Phe Ile Lys Gln Met Ser Glu Leu Gly Ala Gly Lys Gly Ile Pro 40 Cys Ile Tyr Thr Gly Lys Pro Glu Ser Gln Arg Ala Pro Asn His Pro 55 Gly Cys Glu Gly Gln Ala Ile Arg Val Asn Asn Ser Ala Leu Ala Phe

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70
                                        75
65
Leu Gln Asn Pro Asn Gly Ser Ile Asn Lys Lys Arg Lys Val Pro Phe
                85
                                    90
Thr Gln Glu Pro Glu Lys
            100
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gacctggtgc ggcccacttc gtaccgcaat gcctggtcaa ccctcgacac tttgctgggg
ttgggcgtcg tgccgatcgt caacgagaac gacacggtcg ccaccggaga aattcggttt
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gtggaggttg tggaggacat cgatgcattg gatgtcgata cccataaagc tggttcgggg
gtgggaaccg gcggcatgac cacgaaactt gaagccgccc gaatggccac ctgtgccggg
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cgtcattcct cgttgttggc ggtgggtgtg actcgggtac acggggattt ccaagcaggc
gacccagtga cgatcctggc ctccgacggt cgagttgttg gtcgcggtat cgcccagttc
tcccatgatg aggtgcgcgt catg
744
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<211> 248
<212> PRT
<213> Homo sapiens
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                                    10
Leu Thr Val Asn Asp Leu Val Arg Pro Thr Ser Tyr Arg Asn Ala Trp
Ser Thr Leu Asp Thr Leu Leu Gly Leu Gly Val Val Pro Ile Val Asn
Glu Asn Asp Thr Val Ala Thr Gly Glu Ile Arg Phe Gly Asp Asn Asp
```

Arg Leu Ala Ala Leu Val Ala Glu Leu Val Arg Ala Gln Ala Leu Ile

```
75
                    70
Leu Leu Ser Asp Val Asp Ala Leu Tyr Thr Ala His Pro Asp Ser Pro
                85
                                    90
Asp Ala Arg Arg Val Glu Val Val Glu Asp Ile Asp Ala Leu Asp Val
            100
                                105
Asp Thr His Lys Ala Gly Ser Gly Val Gly Thr Gly Gly Met Thr Thr
                            120
Lys Leu Glu Ala Ala Arg Met Ala Thr Cys Ala Gly Val Pro Val Val
Leu Ala Ala Ala Val Asp Ala Pro Asp Val Leu Ala Gly Ala Pro Val
                    150
Gly Thr Tyr Phe Arg Pro Leu Ala Thr Arg Arg Pro Arg Arg Leu Leu
                                    170
Trp Leu Ala Asp Ala Ala Thr Pro Gln Gly Gln Ile Val Ile Asp Asp
                                185
Gly Ala Val Glu Ala Leu Thr Gln Arg His Ser Ser Leu Leu Ala Val
                            200
Gly Val Thr Arg Val His Gly Asp Phe Gln Ala Gly Asp Pro Val Thr
                        215
Ile Leu Ala Ser Asp Gly Arg Val Val Gly Arg Gly Ile Ala Gln Phe
                    230
Ser His Asp Glu Val Arg Val Met
                245
<210> 2449
<211> 296
<212> DNA
<213> Homo sapiens
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ctactgetet eccetectee etgggeeetg teetateeec agaggeeaga caggeettee
togoatgoaa gagtotocot ogocotgoog gacagtggoo tocatotaco tgootgtott
qctqqactcc agaacactcc agtcctttcc cccttggggg ttgggggggg cccccccttt
ttttccccc ctttccctct tcattccaca ggaggccagc ctcaacatcc ccnccc
296
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<211> 90
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<213> Homo sapiens
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Met Asn Thr Cys Arg His Gln Leu Pro Lys Ile Ser Tyr Cys Ser Pro
Leu Leu Pro Gly Pro Cys Pro Ile Pro Arg Gly Gln Thr Gly Leu Pro
Arg Met Gln Glu Ser Pro Ser Pro Cys Arg Thr Val Ala Ser Ile Tyr
Leu Pro Val Leu Leu Asp Ser Arg Thr Leu Gln Ser Phe Pro Pro Trp
```

```
55
    50
Gly Leu Gly Gly Ala Pro Pro Phe Phe Pro Pro Leu Ser Leu Phe Ile
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Pro Gln Glu Ala Ser Leu Asn Ile Pro Xaa
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<210> 2451
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cggggcgtcc ccagggttgt cgtcgtcgaa gatgccgacc gcatcactga acgcggagct
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589
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<211> 121
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<213> Homo sapiens
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 1 '
Ile Cys Asn Asp Asp Leu Val Ser Asp Val Leu Thr Gly Val Trp Ala
                                25
Asp Leu Val Gly Gln Glu Lys Ala Val Gly Val Leu Arg Arg Ala Ala
                            40
Glu Ser Gln Pro Gly Arg Ser Ser His Ala Met Ser His Ala Trp Leu
                        55
Ile Thr Gly Pro Pro Gly Ser Gly Arg Ser Asn Ala Ala Lys Ala Phe
                    70
Ala Ala Ala Leu Gln Cys Val Asp His Gly Cys Gly Gln Cys Asn Ala
                                    90
Cys Arg Thr Xaa Leu Ser Gly Ala His Pro Asp Val Thr Leu Val Arg
Thr Glu Ala Leu Ser Ile Gly Val Asp
                            120
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115

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<211> 695
<212> DNA
<213> Homo sapiens
<400> 2453
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120
acaggttggc acacgcacat gcccctgggt atgctcatgt ccattcatcc atcccagcct
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gcacaccett atgtggtgca cacacacteg tgcacacgga gccacaccag cacatgetca
gaggcatttg tgtgcgtggg catttgcagc atgactcaga acggagtatg gggtggcgcg
gegtggetgg ggaggtecca teagecegee tetgaaacce teecaacctg eccateetgg
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gaggagetge tetegtetga ageetgetae gaatgeagga teaatggeet eteceetegg
gaccggccac gacgcagtgc ccacagggac caccaggtga catgggtgct gcactaggca
ggggtggcca gggaatgggt gagtgtggga aagaggctgt ggacccgact tagtcatgtc
agececega agaaggagea eeaggeteea gatet
695
<210> 2454
<211> 166
<212> PRT
<213> Homo sapiens
<400> 2454
Met Ser Tyr Ser Pro Cys Glu His Thr Gly Trp His Thr His Met Pro
Leu Gly Met Leu Met Ser Ile His Pro Ser Gln Pro Val His Val Leu
Ser Leu Leu Cys Ser His Leu Cys Pro Asn Glu Pro Arg Asp Thr His
Ala His Pro Tyr Val Val His Thr His Ser Cys Thr Arg Ser His Thr
Ser Thr Cys Ser Glu Ala Phe Val Cys Val Gly Ile Cys Ser Met Thr
                    70
                                        75
Gln Asn Gly Val Trp Gly Gly Ala Ala Trp Leu Gly Arg Ser His Gln
Pro Ala Ser Glu Thr Leu Pro Thr Cys Pro Ser Trp Pro Arg His Cys
                                105
Val Ser Gly Leu Gly Phe Ser Pro Gly Pro Gln Asp Thr Pro Asp Lys
                            120
Glu Glu Leu Leu Ser Ser Glu Ala Cys Tyr Glu Cys Arg Ile Asn Gly
```

```
140
   130
                        135
Leu Ser Pro Arg Asp Arg Pro Arg Arg Ser Ala His Arg Asp His Gln
                                        155
                    150
Val Thr Trp Val Leu His
               165
<210> 2455
<211> 378
<212> DNA
<213> Homo sapiens
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aaagaactcg ttctgggcga atcgaagtgg caggacgagt tgatcaacaa cttcatcgtc
gegetgtttg caggegtggt gttgetgtte geggtgetgg tgetgetgta eeggegettg
ctgccgccgt tcatcaacgt gatgtcgctg gcggtggcac cgctgggcgg gttgatcggc
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378
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<212> PRT
<213> Homo sapiens
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Gly Val Val Ser Gly Thr Ala Gln Lys Glu Ile His Ala Leu Pro Ile
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Met Lys Ala Leu Pro Met Gly Val Lys Glu Leu Val Leu Gly Glu Ser
Lys Trp Gln Asp Glu Leu Ile Asn Asn Phe Ile Val Ala Leu Phe Ala
                        55
Gly Val Val Leu Leu Phe Ala Val Leu Val Leu Tyr Arg Arg Leu
                                        75
                    70
Leu Pro Pro Phe Ile Asn Val Met Ser Leu Ala Val Ala Pro Leu Gly
                85
Gly Leu Ile Gly Leu Trp Leu Thr Asn Thr Pro Ile Ser Met Pro Val
                                105
Tyr Ile Gly Leu Ile Met Leu Leu Gly Ile Val Ala Lys Asn
        115
                            120
<210> 2457
<211> 754
<212> DNA
<213> Homo sapiens
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145
                    150
Arg Glu Gln Leu Arg Asn Leu Pro Arg Arg Asn Cys Lys Ala Leu Leu
                165
                                    170
Leu Phe Trp Leu Leu Ala Leu Ala Gly Ala Arg Gln Ile Leu Trp Val
                                185
Arg His Trp Phe Arg Ile Cys His Arg Gln Cys Arg Leu Cys Val Ser
                            200
Pro Gly Thr Thr Ser Ile Pro Met Asn Phe Pro Ile Leu Asp Pro Gly
                        215
Ala Met Pro Leu Pro Met Thr Pro Ser Leu His Ala
                    230
<210> 2459
<211> 382
<212> DNA
<213> Homo sapiens
<400> 2459
accegitgeae agategitet ggeegegitge actgeecege teaageaaat egetateaae
getggtettg agggeggegt egtggetgag aaggtegetg gtetgeeege aggacaggge
ctcaacgcgg ccaatgacga gtatgtcgac atggtagagg ccggcatcat tgacccggcc
aaqqtqaccc qttcqqctct gcagaacqcc qcgtccatcg cggccctgtt cctcaccact
qaaqccqtca tcgctgacaa gcccgagcct gttaaggctc ccgctggcgg cggtgatatg
gacggtatgg gtggcatggg cggcatgatg tgatcgtgta ttgccttcgc tgatttgagt
gggatgccac tttgccccag gc
382
<210> 2460
<211> 110
<212> PRT
<213> Homo sapiens
<400> 2460
Thr Gly Ala Gln Ile Val Leu Ala Ala Cys Thr Ala Pro Leu Lys Gln
Ile Ala Ile Asn Ala Gly Leu Glu Gly Gly Val Val Ala Glu Lys Val
Ala Gly Leu Pro Ala Gly Gln Gly Leu Asn Ala Ala Asn Asp Glu Tyr
                            40
Val Asp Met Val Glu Ala Gly Ile Ile Asp Pro Ala Lys Val Thr Arg
Ser Ala Leu Gln Asn Ala Ala Ser Ile Ala Ala Leu Phe Leu Thr Thr
Glu Ala Val Ile Ala Asp Lys Pro Glu Pro Val Lys Ala Pro Ala Gly
                                    90
Gly Gly Asp Met Asp Gly Met Gly Gly Met Gly Gly Met Met
                                                     110
            100
                                105
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<211> 558
<212> DNA
<213> Homo sapiens
<400> 2461
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cgatgtggta ttcgcagtcg cggatacgct gcaacacacc tacacccaat tgcgcgacgg
ctggttcggc agccctaagg tgtgcatatc gatgcgtgga tggccgtcga tggcgtcgac
ggctggaaag tcgaactcag ccagatggcg ccgcctgccg acgcgcatca cctgtacttc
atcaacctcq qcqqctacqa qqccaacqct tttgqcgagg cccatcatta cctqctgqtg
qtcqcccqqq acaaacaqqa aqccaaqcgc aaggggcagc ggcaaatgtt gcaacactgg
420
teccaggeee acacegatgg egtaatggat ategaegaet gettgeegat tgatetggtg
gacggtcgct atgttcacct ggtgcaaggc ccgcaccagc cgatcatcca gcacaacgac
tacatcatcc tgccgcga
558
<210> 2462
<211> 148
<212> PRT
<213> Homo sapiens
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Met Val Ser Leu Phe Gln Val Ala Arg Thr Asp Leu Gln Cys Cys Leu
Ser Ser Cys Ser Gly Ala Ser Thr His Gly Leu Lys Ser Lys Phe Thr
                                25
Met Trp Tyr Ser Gln Ser Arg Ile Arg Cys Asn Thr Pro Thr Pro Asn
Cys Ala Thr Ala Gly Ser Ala Ala Leu Arg Cys Ala Tyr Arg Cys Val
Asp Gly Arg Arg Trp Arg Arg Leu Glu Ser Arg Thr Gln Pro Asp
Gly Ala Ala Cys Arg Arg Ala Ser Pro Val Leu His Gln Pro Arg Arg
                                    90
Leu Arg Gly Gln Arg Phe Trp Arg Gly Pro Ser Leu Pro Ala Gly Gly
                                105
Arg Pro Gly Gln Thr Gly Ser Gln Ala Gln Gly Ala Ala Ala Asn Val
                            120
Ala Thr Leu Val Pro Gly Pro His Arg Trp Arg Asn Gly Tyr Arg Arg
    130
                        135
                                            140
Leu Leu Ala Asp
145
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<210> 2463
<211> 333
<212> DNA
<213> Homo sapiens
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ttcqqcctqc tqattattct gttatacgtc gcgctggcgc tgtgngcgcc gctgctggcg
ccctatggcg aaacccaggt ggtgggtgaa ggcttcgcgc cgtggagcgg ccagtttttg
ctgggcaccg ataacctggg gcgcgacatg ttcagccgcc tgatgtacgg cgcgcgcaat
accttgggca ttgccttcct gacgacgacg ctggcgtttc tgctcggtgg tttgagcggt
ttggtcgcgg cgatcaaggg cggttgggtc gac
333
<210> 2464
<211> 106
<212> PRT
<213> Homo sapiens
<400> 2464
Met Ser Leu Leu Ser Gln Val Ala Arg Ala Pro Leu Ser Ala Lys Phe
                                    10
Gly Leu Leu Ile Ile Leu Leu Tyr Val Ala Leu Ala Leu Xaa Ala Pro
Leu Leu Ala Pro Tyr Gly Glu Thr Gln Val Val Gly Glu Gly Phe Ala
Pro Trp Ser Gly Gln Phe Leu Leu Gly Thr Asp Asn Leu Gly Arg Asp
                        55
Met Phe Ser Arg Leu Met Tyr Gly Ala Arg Asn Thr Leu Gly Ile Ala
                                         75
Phe Leu Thr Thr Leu Ala Phe Leu Leu Gly Gly Leu Ser Gly Leu
                                                         95
Val Ala Ala Ile Lys Gly Gly Trp Val Asp
                                105
            100
<210> 2465
<211> 434
<212> DNA
<213> Homo sapiens
<400> 2465
nntcatgagg acatttccct catatttggt ggtggtaaat ccctcctggg acacggggaa
atgaccagag gctggcggcc cacctggcag gaacagatgc cagctctgct gcagccatcg
ccccttgagc gggtggctct gtgcctcttt ctgcactgct ggtgggtggt gctgttggct
gggtgatgga taccggctgc cagagatggc tcaggtgcca gctgctgggc tatctcaggc
240
```

```
actggctgct gggctatctc gggtgccggc tgctgggcta tctcaggcgc tggctgctgc
tgggctgtct cgggtgctgg ctgttgggac gtctcctgtc ctggcactgg gctctcgggt
getgggtgee agetgetgee tacettgeae tgggetetgg geacteaetg cacteggget
tttccatctc cgac
434
<210> 2466
<211> 82
<212> PRT
<213> Homo sapiens
<400> 2466
Trp Ile Pro Ala Ala Arg Asp Gly Ser Gly Ala Ser Cys Trp Ala Ile
                                    10
Ser Gly Thr Gly Cys Trp Ala Ile Ser Gly Ala Gly Cys Trp Ala Ile
Ser Gly Ala Gly Cys Cys Trp Ala Val Ser Gly Ala Gly Cys Trp Asp
Val Ser Cys Pro Gly Thr Gly Leu Ser Gly Ala Gly Cys Gln Leu Leu
                        55
Pro Thr Leu His Trp Ala Leu Gly Thr His Cys Thr Arg Ala Phe Pro
                                        75
                    70
Ser Pro
<210> 2467
<211> 306
<212> DNA
<213> Homo sapiens
<400> 2467
atggactcca ccggcaccgg agcagggggt aaggggaaga agggagcggc cgggcgcaag
gtcggcgggc caaggaagaa gtcggtgtcg aggtccgtga aggccggtct ccagttcccc
gtcggccgca tcgggcgcta cttgaagaag ggccgctacg cgcagcgtgt cggcaccggc
geoccegtet acctegeege tgteetegaa tacetegeeg etgaggttet ggagetegee
ggtaatgctg ccagggacaa caagaagact cgcattattc cgcgccacgt gcttctggcg
300
atccgg
306
<210> 2468
<211> 102
<212> PRT
<213> Homo sapiens
<400> 2468
Met Asp Ser Thr Gly Thr Gly Ala Gly Gly Lys Gly Lys Gly Ala
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1
Ala Gly Arq Lys Val Gly Gly Pro Arg Lys Lys Ser Val Ser Arg Ser
                                25
Val Lys Ala Gly Leu Gln Phe Pro Val Gly Arg Ile Gly Arg Tyr Leu
Lys Lys Gly Arg Tyr Ala Gln Arg Val Gly Thr Gly Ala Pro Val Tyr
                                            60
Leu Ala Ala Val Leu Glu Tyr Leu Ala Ala Glu Val Leu Glu Leu Ala
Gly Asn Ala Ala Arg Asp Asn Lys Lys Thr Arg Ile Ile Pro Arg His
                                    90
Val Leu Leu Ala Ile Arg
            100
<210> 2469
<211> 489
<212> DNA
<213> Homo sapiens
<400> 2469
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aacagatgag atttcagctg ggacttgcag ccaagtggga tttggccttt tggggagaag
ggaaaqqqca ttcaaagqcc agggacagag tatggtcaaa ggcatggaga tgaggaagag
gggaccagag cagagggtca ggttggaaag cgagttgggg tcaatctgca aaggggctga
cgtgccaggt aaaaaacagg agcacagttt agttttgtcg gatcatttca ggtggaaggg
cagtgggaat gttggagaaa acactttttg gtgtcgttac attgaatctg ctcatctata
agaataaaac tttatttcat agagttattg tatggctcaa aataggtatg aagaattaag
aaaaagaatt ttagatttaa aatgaaaagg cacctacaaa agtagagtgg tagagttacc
aacgtggag
489
<210> 2470
<211> 115
<212> PRT
<213> Homo sapiens
<400> 2470
Met Ala Ser Leu Lys Pro Ala Leu Pro Trp Pro Arg Lys Leu Cys Arg
                                    10
Thr Asp Glu Ile Ser Ala Gly Thr Cys Ser Gln Val Gly Phe Gly Leu
Leu Gly Arg Arg Glu Arg Ala Phe Lys Gly Gln Gly Gln Ser Met Val
Lys Gly Met Glu Met Arg Lys Arg Gly Pro Glu Gln Arg Val Arg Leu
Glu Ser Glu Leu Gly Ser Ile Cys Lys Gly Ala Asp Val Pro Gly Lys
```

```
75
                                                             80
65
                    70
Lys Gln Glu His Ser Leu Val Leu Ser Asp His Phe Arg Trp Lys Gly
                                    90
Ser Gly Asn Val Gly Glu Asn Thr Phe Trp Cys Arg Tyr Ile Glu Ser
                                105
            100
Ala His Leu
        115
<210> 2471
<211> 779
<212> DNA
<213> Homo sapiens
<400> 2471
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ctcacatggt ggcccttgac ttctttcaca gtgaggacct ctgcttcatg aggctcataa
gaagaggage taaggactat titigteatgg gggcgccaat ccactgcate tictactata
atteteteat tteetgagge aatateaget ceaagatgtg teeaggagtt ettaggataa
gcactgtaaa gatgaacttt cccataaacc ccaattgttc ctgggtcaat atgaattcca
300
ttcatacggt cacaaaagac tccctctgag gctctaagga gaatcagaag cttttgttcc
ttttctaagg gattttctaa agtaccaact ttcagctccc cgcctgcaat gaccatgcat
gecacactea gaacattget tetgtecaca gggaagteta aggtececat cacatacage
cctttgaaga attggaaaat ctgtatccac aaggacagtt ctgttgggta aaatgagaac
qtcatcccca gggcctggaa tggtattgtt gtatcctccc cagccttctt caacaccttg
ccatgtttca gggagggacc attttaaagc tgattcaggg gcagaggtag aagctgaaat
agttgggggc atacetteet teaceeggag aatgaettga aettggeett cacetaaaac
cagataggtg agttgcctca gctggctatt gaagaaccag tcacagcctt ggttctggc
779
<210> 2472
<211> 181
<212> PRT
<213> Homo sapiens
<400> 2472
Met Thr Phe Ser Phe Tyr Pro Thr Glu Leu Ser Leu Trp Ile Gln Ile
Phe Gln Phe Phe Lys Gly Leu Tyr Val Met Gly Thr Leu Asp Phe Pro
                                25
Val Asp Arg Ser Asn Val Leu Ser Val Ala Cys Met Val Ile Ala Gly
Gly Glu Leu Lys Val Gly Thr Leu Glu Asn Pro Leu Glu Lys Glu Gln
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50
Lys Leu Leu Ile Leu Leu Arg Ala Ser Glu Gly Val Phe Cys Asp Arg
                                        75
                                                             80
Met Asn Gly Ile His Ile Asp Pro Gly Thr Ile Gly Val Tyr Gly Lys
Val His Leu Tyr Ser Ala Tyr Pro Lys Asn Ser Trp Thr His Leu Gly
                                105
Ala Asp Ile Ala Ser Gly Asn Glu Arg Ile Ile Val Glu Asp Ala Val
                            120
Asp Trp Arg Pro His Asp Lys Ile Val Leu Ser Ser Ser Tyr Glu
                        135
Pro His Glu Ala Glu Val Leu Thr Val Lys Glu Val Lys Gly His His
                    150
                                        155
Val Arg Ile Tyr Glu Arg Leu Lys His Arg His Ile Gly Ser Val His
                                                         175
                                    170
Val Thr Glu Asp Gly
            180
<210> 2473
<211> 698
<212> DNA
<213> Homo sapiens
<400> 2473
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120
ccgtggtgtg gatggtacnc tgagaatgtg gacatctctg tgaccctcta cagggacccc
cacgtggacc agtatgaggc caaagagtgg acatttatta ttgaaaatga gtctaagggg
cageggaagg tgetggeeac ggeegaggtg gaeetggeec geeatgeeag ggeeegtgee
ntgtccaagt concactgag gotgoggotg aagccaaagt cagtgaagac ggtgcaggot
gagetgagee teactettte eggggtgetg etgegggagg geegtgeeae ggaegatgae
420
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tttgctgaga gtgatgaaga tgaggctcat ggcccaggag ccccggaggc ccgggctcga
gtcccccagc caggtgggct cacagcctgc tgtggatcga gactgccaag acctggggag
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tgcccaggca gtcccaacca acccagcagc ctcaattg
698
<210> 2474
<211> 232
<212> PRT
<213> Homo sapiens
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Xaa Cys Thr Lys Lys Trp Gln Pro Asp Lys Leu Val Val Trp Thr

<400> 2474

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Ala Ser Arg Thr His Thr Gly Ala Pro Trp Cys Gly Trp Tyr Xaa Glu
                            40
Asn Val Asp Ile Ser Val Thr Leu Tyr Arg Asp Pro His Val Asp Gln
Tyr Glu Ala Lys Glu Trp Thr Phe Ile Ile Glu Asn Glu Ser Lys Gly
Gln Arg Lys Val Leu Ala Thr Ala Glu Val Asp Leu Ala Arg His Ala
                                    90
Arg Ala Arg Ala Xaa Ser Lys Ser Xaa Leu Arg Leu Arg Leu Lys Pro
                                105
            100
Lys Ser Val Lys Thr Val Gln Ala Glu Leu Ser Leu Thr Leu Ser Gly
Val Leu Leu Arg Glu Gly Arg Ala Thr Asp Asp Asp Met Gln Ser Leu
                                            140
Ala Ser Leu Met Ser Val Lys Pro Ser Asp Val Gly Asn Leu Asp Asp
                                        155
                    150
Phe Ala Glu Ser Asp Glu Asp Glu Ala His Gly Pro Gly Ala Pro Glu
                                    170
                165
Ala Arg Ala Arg Val Pro Gln Pro Gly Gly Leu Thr Ala Cys Cys Gly
                                185
            180
Ser Arg Leu Pro Arg Pro Gly Glu Gly Gly Leu Pro Gly Pro Pro Ala
                                                205
                            200
Thr Cys Cys Ala Arg Pro Val Met Gly Thr His Tyr Cys Pro Gly Ser
                                            220
                        215
Pro Asn Gln Pro Ser Ser Leu Asn
                    230
<210> 2475
<211> 1251
<212> DNA
<213> Homo sapiens
<400> 2475
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tgccaccgca agegetttgt ggcagtcccc gagggcatcc ccaccgagac gcgcctgctg
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ggcgtcttca ctggcctcag caacctgacc aagctggaca tcagcgagaa caagatcgtt
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atcctactgg actacatgtt tcaggacctg tacaacctca agtcactgga ggttggcgac aatgaceteg tetacatete teacegegee tteageggee teaacageet ggagcagetg acgetggaga aatgeaacet gacetecate cecacegagg egetgteeca eetgeaegge ctcatcgtcc tgaggctccg gcacctcaac atcaatgcca tccgggacta ctccttcaag aggetgtace gacteaaggt cttggagate teccaetgge cetaettgga caccatgaca 780 cccaactqcc totacqqcct caacctgacq tocctqtcca tcacactq caatctgacc getgtgeeet acetggeegt cegecaceta gtetatetee getteeteaa ceteteetae aaccccatca gcaccattga gggctccatg ttgcatgagc tgctccggct gcaggagatc cagetggtgg gegggeaget gggegggtgg agecetgeet teegeggeet caactacetg cgcgtgctca atgtctctgg caaccagctg accacactgg aggaatcagt cttccactcg 1080 gtgggcaacc tggagacact catectggac tecaaccege tggcctgcga ctgtcggctc ctgtgggtgt tccggcgccg tggcctacaa acttcaaccg gcagcagccc acgtgcgcca eqeceqaqtt tqtccagggg caaggagtte aaggaettee etgatgtget a 1251 <210> 2476 <211> 417 <212> PRT <213> Homo sapiens <400> 2476 Xaa Ala Pro Glu Met Gln Val Ser Lys Arg Met Leu Ala Gly Gly Val Arg Ser Met Pro Ser Pro Leu Leu Ala Cys Trp Gln Pro Ile Leu Leu 25 Leu Val Leu Gly Ser Val Leu Ser Gly Ser Ala Thr Gly Cys Pro Pro Arg Cys Glu Cys Ser Ala Gln Asp Arg Ala Val Leu Cys His Arg Lys Arg Phe Val Ala Val Pro Glu Gly Ile Pro Thr Glu Thr Arg Leu Leu 75 Asp Leu Gly Lys Asn Arg Ile Lys Thr Leu Asn Gln Asp Glu Phe Ala 85 Ser Phe Pro His Leu Glu Glu Leu Glu Leu Asn Glu Asn Ile Val Ser 105 Ala Val Glu Pro Gly Ala Phe Asn Asn Leu Phe Asn Leu Arg Thr Leu Gly Leu Arg Ser Asn Arg Leu Lys Leu Ile Pro Leu Gly Val Phe Thr Gly Leu Ser Asn Leu Thr Lys Leu Asp Ile Ser Glu Asn Lys Ile Val 155 150 Ile Leu Leu Asp Tyr Met Phe Gln Asp Leu Tyr Asn Leu Lys Ser Leu

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165
                                    170
Glu Val Gly Asp Asn Asp Leu Val Tyr Ile Ser His Arg Ala Phe Ser
                                185
Gly Leu Asn Ser Leu Glu Gln Leu Thr Leu Glu Lys Cys Asn Leu Thr
                            200
Ser Ile Pro Thr Glu Ala Leu Ser His Leu His Gly Leu Ile Val Leu
                        215
Arg Leu Arg His Leu Asn Ile Asn Ala Ile Arg Asp Tyr Ser Phe Lys
                                        235
Arg Leu Tyr Arg Leu Lys Val Leu Glu Ile Ser His Trp Pro Tyr Leu
                                    250
Asp Thr Met Thr Pro Asn Cys Leu Tyr Gly Leu Asn Leu Thr Ser Leu
                                265
Ser Ile Thr His Cys Asn Leu Thr Ala Val Pro Tyr Leu Ala Val Arg
                            280
His Leu Val Tyr Leu Arg Phe Leu Asn Leu Ser Tyr Asn Pro Ile Ser
                        295
Thr Ile Glu Gly Ser Met Leu His Glu Leu Leu Arg Leu Gln Glu Ile
Gln Leu Val Gly Gly Gln Leu Ala Gly Trp Ser Pro Ala Phe Arg Gly
                                    330
Leu Asn Tyr Leu Arg Val Leu Asn Val Ser Gly Asn Gln Leu Thr Thr
                                345
Leu Glu Glu Ser Val Phe His Ser Val Gly Asn Leu Glu Thr Leu Ile
                            360
Leu Asp Ser Asn Pro Leu Ala Cys Asp Cys Arg Leu Leu Trp Val Phe
                        375
Arg Arg Arg Gly Leu Gln Thr Ser Thr Gly Ser Ser Pro Arg Ala Pro
                                        395
Arg Pro Ser Leu Ser Arg Gly Lys Glu Phe Lys Asp Phe Pro Asp Val
                                    410
                405
Leu
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<210> 2477

<211> 548

<212> DNA

<213> Homo sapiens

## <400> 2477

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aagtgtgagg agttcccgtc cagcctgtca tcagtctccc caggtcttga agcggcggcc

ctgctcctgg ccgtgaccat ggaccctctg gagaccccta tcaaggatgg catcctctac

cagcagcatg teaagtttgg caagaagtge tggeggaagg tgtgggetet getgtatgea

ggaggcccat caggcgtggc acggctggag aactgggagg tccgggatgg tggcctggga

gcagcgggtg acaggtcggc ggggcctggc cggcgagggg agcgacgggt catccgcctg

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gctgactgtg tgtccgtgct gccggctgac ggcgagagct gcccccggga caccggtgcc
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540
atgggccc
548
<210> 2478<211> 113
<212> PRT
<213> Homo sapiens
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Phe Gly Lys Lys Cys Trp Arg Lys Val Trp Ala Leu Leu Tyr Ala Gly
                                25
Gly Pro Ser Gly Val Ala Arg Leu Glu Asn Trp Glu Val Arg Asp Gly
Gly Leu Gly Ala Ala Gly Asp Arg Ser Ala Gly Pro Gly Arg Arg Gly
Glu Arg Arg Val Ile Arg Leu Ala Asp Cys Val Ser Val Leu Pro Ala
                                        75
Asp Gly Glu Ser Cys Pro Arg Asp Thr Gly Ala Phe Leu Leu Thr Thr
                                    90
Thr Glu Arg Ser His Leu Leu Ala Ala Gln His Arg Gln Ala Trp Met
                                105
                                                     110
            100
Gly
<210> 2479
<211> 324
<212> DNA
<213> Homo sapiens
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aggtactgga atgacaatga agcagcagaa aggcttgcgt tgatgtgggc taaaaccttc
aaatatgcgt cgataaacgt ctcctggcag accgggatta gcaatagcga cgacgagggc
aatgaagatg aagacatgtt ctacgccggt atctccattc cgctgggagg cggggcgtac
tctaactcct ggtatcgtga atat
324
<210> 2480
<211> 108
<212> PRT
<213> Homo sapiens
<400> 2480
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Glu Phe Met Glu Val Tyr Glu Glu Asp Glu Glu Tyr Ala Tyr Glu Lys
Tyr Glu Thr His Phe Gly Thr Ser Trp Met Glu Glu Thr Ala Gly Thr
Phe Ser Leu Asn Trp Tyr Arg Ser Arg Tyr Trp Asn Asp Asn Glu Ala
                            40
Ala Glu Arg Leu Ala Leu Met Trp Ala Lys Thr Phe Lys Tyr Ala Ser
Ile Asn Val Ser Trp Gln Thr Gly Ile Ser Asn Ser Asp Asp Glu Gly
Asn Glu Asp Glu Asp Met Phe Tyr Ala Gly Ile Ser Ile Pro Leu Gly
Gly Gly Ala Tyr Ser Asn Ser Trp Tyr Arg Glu Tyr
<210> 2481
<211> 484
<212> DNA
<213> Homo sapiens
<400> 2481
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gcattttcag ctatgttgat ggctggtatc gatggtatca aaaacaagat tcaccctggc
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Phe Glu Ala Pro Val Met Leu Ala Tyr Ser Ala Arg Asn Arg Ser Ala
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Ser Ile Arg Ile Pro Tyr Val Ala Ser Pro Lys Gly Lys Arg Ile Glu
                            40
Ala Arg Phe Pro Asp Pro Thr Ala Asn Pro Tyr Leu Ala Phe Ser Ala
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Met Leu Met Ala Gly Ile Asp Gly Ile Lys Asn Lys Ile His Pro Gly
Asp Ala Ala Asp Lys Asp Leu Tyr Asp Leu Pro Ala Glu Glu Ala Ala
                                    90
Ala Ile Pro Gln Val Ala Ser Ser Leu Glu Glu Ala Leu Lys Cys Leu
                                105
            100
Asp Gln Asp Arg Glu Phe Leu Thr Gln Gly Gly Val Phe Ser Asp Asp
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Met Ile Asp Ala Tyr Ile Ala Leu Lys Ala Glu Glu Ala Gln Arg Val
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Ala Met Thr Thr Pro Leu Glu Phe Glu Leu Tyr Tyr Ser Leu
<210> 2483
<211> 477
<212> DNA
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eqtecceage egetteetee tggeettgtt ecceetteee tgtgaaggag agaacagttt
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cagttagggt gggcaggaag gaagtetetg ccacaagtet gcattecagg etgtttecag
aagtgggaat tetetegtge eetggagtet gggaatgeat tittagtite eeagetteag
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477
<210> 2484
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<212> PRT
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Met His Ser Gln Thr Pro Gly His Glu Arg Ile Pro Thr Ser Gly Asn
Ser Leu Glu Cys Arg Leu Val Ala Glu Thr Ser Phe Leu Pro Thr Leu
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                                25
Thr Val Leu Cys Gly Arg Gln Gln Ser Leu Pro Arg Lys Gln Asn Cys
Thr Thr Lys Asp His Phe Lys Val Gly Gly Ala His Cys Pro Asp Cys
Arg Pro Ala Ser Ile Ser Gly Pro Ala Glu Thr Val Leu Ser Phe Thr
Gly Lys Gly Glu Gln Gly Gln Glu Ala Ala Gly Asp Ala Gly Asp
                                    90
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Gly Val Ala Asp Arg Gly Ser Glu Val Ser Ser Glu Ala Ala Cys Ser
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 Pro Glu Gly Pro Gln Ala Arg Val Arg Arg Glu Arg Glu Glu Pro Arg
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        115
 Phe Gly
    130
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gagetgggtg gtatgaactt catggccatc agcaaagacg gtcagetcgt caccecegag
180
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600
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608
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 <211> 165
 <212> PRT
 <213> Homo sapiens
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Gln Ile Asp Ala Lys Thr Arg Asp Cys Asn Glu Val Leu Phe Val Asp
Ala Val Glu His Arg Trp Ile Glu Glu Leu Gly Gly Met Asn Phe Met
Ala Ile Ser Lys Asp Gly Gln Leu Val Thr Pro Glu Leu Ala Gly Thr
 Ile Leu Arg Gly Val Thr Arg Lys Ser Ile Leu Glu Val Ala Pro Asp
                     70
                                         75
Leu Gly Leu Glu Pro Val Glu Arg Lys Ile Asp Val Asp Glu Leu Leu
                 85
                                     90
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Asp Gly Val Arg Ser Gly Glu Phe Pro Glu Val Phe Ala Cys Gly Thr
                                105
Ala Ala Val Val Thr Pro Ile Gly Ser Phe Leu Asp Gly Asp Thr Asp
                                                 125
                            120
Val Lys Val Ser Glu Pro Thr Gly Lys Thr Thr Met Glu Ile Arg Arg
                                            140
                        135
Arg Leu Leu Asp Ile Gln Phe Gly Arg Ala Glu Asp Thr His Gly Trp
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                    150
Leu Lys Arg Val Cys
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120
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cagetgggag gggetgetee teaggeteet getgeecace aaaageeega ggceteagtg
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339
<210> 2488
<211> 113
<212> PRT
<213> Homo sapiens
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Glu Ser Pro Asp Ser Leu Gln Arg Asn Gln Lys Glu Leu Gln Gly Leu
Leu Thr Gln Val Gln Ala Leu Glu Lys Glu Ala Ala Ser Ser Val Asp
                            40
Val Gln Ala Leu Arg Arg Leu Phe Glu Ala Val Pro Gln Leu Gly Gly
                        55
Ala Ala Pro Gln Ala Pro Ala Ala His Gln Lys Pro Glu Ala Ser Val
                                        75
                    70
Glu Gln Ala Phe Gly Glu Leu Thr Arg Val Ser Thr Glu Val Ala Gln
                                    90
Leu Lys Glu Gln Thr Leu Val Arg Leu Leu Asp Ile Glu Glu Ala Val
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<210> 2489

His

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<211> 594
<212> DNA
<213> Homo sapiens
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geocececa eccetgagtg ggtecegtae etgtacgttg ceatggtegg tgeactgatg
ategetgteg gtategeetg ceagetgatt cagetgtatg teagegtgeg tgategeaag
cagaacatgt gcgaatccgg cgacccatgg aatgcacaca ccctggaatg gtcg
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<211> 198
<212> PRT
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Val Lys Leu Phe Asn Trp Leu Val Thr Ile Tyr His Gly Arg Val Arg
                                25
Ile Thr Ser Gln Val Leu Trp Thr Leu Gly Phe Met Val Thr Phe Ala
Ile Gly Gly Met Thr Gly Val Leu Leu Ala Ile Pro Gly Ala Asp Phe
Val Leu His Asn Ser Leu Phe Gly Ile Ala His Phe His Asn Val Ile
                                        75
Ile Gly Gly Ala Val Phe Gly Tyr Ile Ala Gly Phe Ser Phe Tyr Phe
                                    90
Pro Lys Ala Phe Gly Phe Lys Leu His Glu Ser Trp Gly Lys Ala Ala
                                105
Phe Trp Phe Trp Ile Ser Gly Phe Phe Val Ala Phe Met Pro Leu Tyr
Ala Leu Gly Phe Met Gly Met Thr Arg Cys Leu Asn Ala Pro Pro Thr
                        135
Pro Glu Trp Val Pro Tyr Leu Tyr Val Ala Met Val Gly Ala Leu Met
                                        155
                    150
Ile Ala Val Gly Ile Ala Cys Gln Leu Ile Gln Leu Tyr Val Ser Val
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165

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Arg Asp Arg Lys Gln Asn Met Cys Glu Ser Gly Asp Pro Trp Asn Ala
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His Thr Leu Glu Trp Ser
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ccagcccage egegeatget egeggeegtg atetgtggea getggetgee egategetgg
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gatgctcttg gcgtgaggct ggtgcgcaag gctgaccgtc aggctccatg gcatcccggt
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acagtagtgt cgaaggctgg tctgcctcag cgcacctgtg cggtcgagtt caatctagat
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<210> 2492
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Pro Tyr Leu Arg Thr Thr Leu Leu Pro Gly Leu Phe His Ala Val Thr
Thr Asn Met Ser Arg Ser Gln Asp Asp Leu Ala Val Phe Glu Ser Gly
Thr Val Phe Arg Ala Val Thr Pro Ala Ala Ala Pro Arg Pro Gly Val
                        55
Asp Glu Arg Pro Ser Asp Glu Val Leu Ala Glu Ile Asp Ala Ala Leu
Pro Ala Gln Pro Arg Met Leu Ala Ala Val Ile Cys Gly Ser Trp Leu
Pro Asp Arg Trp Asp Gly Glu Ser Val Lys Ala Asp Trp Arg His Ala
                                105
Val Leu Val Ala Gln Lys Ala Ala Asp Ala Leu Gly Val Arg Leu Val
        115
                            120
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Arg Lys Ala Asp Arg Gln Ala Pro Trp His Pro Gly Arg Cys Ala Ala 135 Leu Ile Val Asp Gly Lys Val Ile Gly His Ala Gly Glu Leu His Pro Thr Val Val Ser Lys Ala Gly Leu Pro Gln Arg Thr Cys Ala Val Glu 170 Phe Asn Leu Asp Ala Leu Val Ala Cys Ala Pro Ser Gly Gly Glu Val 185 180 Met Val Ile Ser Arg 195 <210> 2493 <211> 418 <212> DNA <213> Homo sapiens THE STATE OF <400> 2493 acgogtcagg ttgccggtga tcgtgccacc gtcacctcca tggtgccttc aggagcagac ceceacacet atgagecqte getgegtgae gtteggaeeg tegtgtatte gagagtegeg ctategaact accteatget egaaceteat teggteatea agaceatega etetteeeta cctacgggat ctatcaatgt ctccctggct gaggaagccc aaaagtacgg cgcacaagtg atcocgctgg ttgaaaatgc caacctagac accgtgtggc tggggttgcg cgtcattggc aagggegeca ggeggggage egacegetet teeteggtet acetecaget gaegteggtg gaggggcctg gggacttcac tgcctatatc actgggacct ttggtcgacc tcagatct 418 <210> 2494 <211> 139 <212> PRT <213> Homo sapiens <400> 2494 Thr Arg Gln Val Ala Gly Asp Arg Ala Thr Val Thr Ser Met Val Pro Ser Gly Ala Asp Pro His Thr Tyr Glu Pro Ser Leu Arg Asp Val Arg Thr Val Val Tyr Ser Arg Val Ala Leu Ser Asn Tyr Leu Met Leu Glu 40 Pro His Ser Val Ile Lys Thr Ile Asp Ser Ser Leu Pro Thr Gly Ser Ile Asn Val Ser Leu Ala Glu Glu Ala Gln Lys Tyr Gly Ala Gln Val 75 Ile Pro Leu Val Glu Asn Ala Asn Leu Asp Thr Val Trp Leu Gly Leu Arg Val Ile Gly Lys Gly Ala Arg Gly Ala Asp Arg Ser Ser Ser 105 Val Tyr Leu Gln Leu Thr Ser Val Glu Gly Pro Gly Asp Phe Thr Ala 125 115 120

Tyr Ile Thr Gly Thr Phe Gly Arg Pro Gln Ile 135 130 <210> 2495 <211> 1478 <212> DNA <213> Homo sapiens <400> 2495 nnggcctggc ccagttgcac cacgagcgct geggacactc ggggcggcag tcggtctgtc agtectoccg ccaggtoccg cggcccgcac ctgccgcccg cacctgcage tccgcacctg eggecagtge ctactgeect etettgeege eegeacetge ageeeegeae etgeegettg cacctgcagc cccgcgctct acccggttca agcatggctg accaggcgcc cttcgacacg gacgtcaaca ccctgacccg cttcgtcatg gaggagggca ggaaggcccg cggcacgggc gagttgaccc agctgctcaa ctcgctctgc acagcagtca aagccatctc ttcggcggtg cgcaaggcgg gcatcgcgca cctctatggc attgctggtt ctaccaacgt gacaggtgat caagttaaga agctggacgt cctctccaac gacctggtta tgaacatgtt aaagtcatcc tttgccacgt gtgttctcgt gtcagaagaa gataaacacg ccatcatagt ggaaccggag aaaaggggta aatatgtggt ctgttttgat ccccttgatg gatcttccaa catcgattgc cttgtgtccg ttggaaccat ttttggcatc tatagaaaga aatcaactga tgagccttct gagaaggatg ctctgcaacc aggccggaac ctggtggcag ccggctacgc actgtatggc agtgccacca tgctggtcct tgccatggac tgtggggtca actgcttcat gctggacccg gccatcgggg agttcatttt ggtggacaag gatgtgaaga taaaaaagaa aggtaaaatc tacaqcetta acgagggeta egecaaggae tttgaceetg eegteactga gtacatecag aggaagaagt tecceccaga taatteaget cettatgggg ceeggtatgt gggetecatg gtggctgatg ttcatcgcac tctggtctac ggagggatat ttctgtaccc cgctaacaag aagagcccca atggaaagct gagactgctg tacgaatgca accccatggc ctacgtcatg gagaaggctg ggggaatggc caccactggg aaggaggccg tgttagacgt cattcccaca gacattcacc agagggcgcc ggtgatcttg gggtcccccg acgacgtgct cgagttcctg aaggtgtatg agaagcactc tgcccagtga gcacctgccc tgcctgcatc cggagaattg cetetacety gacettity etcacacage agtaceetya cetyctytye acettacatt 1320

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quacteceta accaaatget gtetecataa tgccaetggt gttaagatat attttgagtg
gatggaggag aaataaactt attcctcctt aaaaaaaa
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Phe Val Met Glu Glu Gly Arg Lys Ala Arg Gly Thr Gly Glu Leu Thr
Gln Leu Leu Asn Ser Leu Cys Thr Ala Val Lys Ala Ile Ser Ser Ala
Val Arg Lys Ala Gly Ile Ala His Leu Tyr Gly Ile Ala Gly Ser Thr
Asn Val Thr Gly Asp Gln Val Lys Lys Leu Asp Val Leu Ser Asn Asp
                    70
Leu Val Met Asn Met Leu Lys Ser Ser Phe Ala Thr Cys Val Leu Val
                                    90
                85
Ser Glu Glu Asp Lys His Ala Ile Ile Val Glu Pro Glu Lys Arg Gly
                                105
Lys Tyr Val Val Cys Phe Asp Pro Leu Asp Gly Ser Ser Asn Ile Asp
                            120
Cys Leu Val Ser Val Gly Thr Ile Phe Gly Ile Tyr Arg Lys Lys Ser
                                            140
                        135
Thr Asp Glu Pro Ser Glu Lys Asp Ala Leu Gln Pro Gly Arg Asn Leu
                                        155
                    150
Val Ala Ala Gly Tyr Ala Leu Tyr Gly Ser Ala Thr Met Leu Val Leu
                165
                                    170
Ala Met Asp Cys Gly Val Asn Cys Phe Met Leu Asp Pro Ala Ile Gly
Glu Phe Ile Leu Val Asp Lys Asp Val Lys Ile Lys Lys Lys Gly Lys
Ile Tyr Ser Leu Asn Glu Gly Tyr Ala Lys Asp Phe Asp Pro Ala Val
                        215
Thr Glu Tyr Ile Gln Arg Lys Lys Phe Pro Pro Asp Asn Ser Ala Pro
                                        235
                    230
Tyr Gly Ala Arg Tyr Val Gly Ser Met Val Ala Asp Val His Arg Thr
                                    250
                245
Leu Val Tyr Gly Gly Ile Phe Leu Tyr Pro Ala Asn Lys Lys Ser Pro
                                265
Asn Gly Lys Leu Arg Leu Leu Tyr Glu Cys Asn Pro Met Ala Tyr Val
Met Glu Lys Ala Gly Gly Met Ala Thr Thr Gly Lys Glu Ala Val Leu
                    300
Asp Val Ile Pro Thr Asp Ile His Gln Arg Ala Pro Val Ile Leu Gly
                                        315
                    310
Ser Pro Asp Asp Val Leu Glu Phe Leu Lys Val Tyr Glu Lys His Ser
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335 325 330 Ala Gln <210> 2497 <211> 399 <212> DNA <213> Homo sapiens <400> 2497 acqcqtqtct tggccggtga aacccttccc gcagcaggtt cagtacgtcg caccggcgag cttggctacc tgccacagga tccccgcgac ccagacatgg aaatgatcgc gagggcaagg atcctgtcag cgcgtggcct ggaccacata ctggaacgga tgcgcaccct ggagtatcag atggcgaacg gttccgagga cgaccgtgcc gttgcgatgg acaaatacgc gaaggctgaa gaccgtctcg tcgcggccgg tggctatggc gcctctgcag aggcagcccg aatcgcgtcg 300 aacttggggc ttgacgaccg cgtcctttcc cagccgttga aaaacctctc gggtggtcag cgtcgtcgcg tcgagctggc gcgcatcctc ttttccgga 399 <210> 2498 <211> 133 <212> PRT <213> Homo sapiens <400> 2498 Thr Arg Val Leu Ala Gly Glu Thr Leu Pro Ala Ala Gly Ser Val Arg Arg Thr Gly Glu Leu Gly Tyr Leu Pro Gln Asp Pro Arg Asp Pro Asp 20 Met Glu Met Ile Ala Arg Ala Arg Ile Leu Ser Ala Arg Gly Leu Asp His Ile Leu Glu Arg Met Arg Thr Leu Glu Tyr Gln Met Ala Asn Gly Ser Glu Asp Asp Arg Ala Val Ala Met Asp Lys Tyr Ala Lys Ala Glu 70 Asp Arg Leu Val Ala Ala Gly Gly Tyr Gly Ala Ser Ala Glu Ala Ala 90 Arg Ile Ala Ser Asn Leu Gly Leu Asp Asp Arg Val Leu Ser Gln Pro 105 Leu Lys Asn Leu Ser Gly Gly Gln Arg Arg Arg Val Glu Leu Ala Arg 120 Ile Leu Phe Ser Gly 130 <210> 2499 <211> 348 <212> DNA <213> Homo sapiens

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180
gaqaaqatag cgcgttacaa tgagaagaag gttcacgcgc tgatgaacga tgccggcatc
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Gly Val Pro Glu Tyr Asp Asp Arg Ala Leu Tyr Glu Lys Leu Ile Leu
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Asp Gly Phe Gln Ala Gly Leu Ser Trp Ile Thr Ile Leu Arg Lys Arg
Asp Asn Phe Arg Lys Ala Phe Asp Asp Phe Gln Pro Glu Lys Ile Ala
Arg Tyr Asn Glu Lys Lys Val His Ala Leu Met Asn Asp Ala Gly Ile
                                        75
Val Arg Asn Arg Ala Lys Ile Glu Gly Thr Ile Ala Ser Ala Lys Ala
                                    90
Tyr Leu Asp Ile Met Glu Lys Gly Pro Gly Phe Ser Arg Leu Leu Trp
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                                105
Asp Phe Val Asp
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120
acttagcaca gggcctgacc tatagtaatg gtcaagaatg atagcggggg tgaggtatgg
ctttcaagag tcaaacaatt ttactggtgc atcatttcca tttattcttt ctcttttgca
taataaaacc actcttaaga ttctaccttg gttagttaga gacaacagtt ctctggaaag
300
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tagattetat agetteaact ceetgaagag atgtgtgeta atttacatea aaaaaateet
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tatattqtta agtttccact taatttttaa gggacactag agaattagta tgactcacct
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gatgtgaaat gctgaatcat taatcacag
569
<210> 2502
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<213> Homo sapiens
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Leu Lys Ile Leu Pro Trp Leu Val Arg Asp Asn Ser Ser Leu Glu Ser
Arg Phe Tyr Ser Phe Asn Ser Leu Lys Arg Cys Val Leu Ile Tyr Ile
                        55
Lys Lys Ile Leu Lys Gly Ile Lys Tyr Ala Lys Asn Cys Gln His His
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Arg Leu Pro Leu Val Ala Ser Gly Ile Leu Leu Ser Phe His Leu Ile
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Phe Lys Gly His
            100
<210> 2503
<211> 419
<212> DNA
<213> Homo sapiens
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accaatgggg agegetttet etacetgeeg ceaceteaet aegteggtee ceacatecea
tegteettgg cateacceat gaggeteteg acacettegg cetececage catecegeet
ctcgtccatt gcgcagacaa aagcctcccg tggaagatgg gcgtcagccc tgggaatcct
gttgattccc acgcctatcc tcacatccag aacagtaagc agcccagggt tccctctgcc
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419
<210> 2504
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<211> 121
<212> PRT
<213> Homo sapiens
<400> 2504
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Leu Tyr Ser Pro Val Cys Thr Asn Gly Glu Arg Phe Leu Tyr Leu Pro
Pro Pro His Tyr Val Gly Pro His Ile Pro Ser Ser Leu Ala Ser Pro
                            40
Met Arg Leu Ser Thr Pro Ser Ala Ser Pro Ala Ile Pro Pro Leu Val
                        55
His Cys Ala Asp Lys Ser Leu Pro Trp Lys Met Gly Val Ser Pro Gly
                    70
Asn Pro Val Asp Ser His Ala Tyr Pro His Ile Gln Asn Ser Lys Gln
Pro Arg Val Pro Ser Ala Lys Ala Val Thr Ser Gly Leu Pro Gly Asp
Thr Ala Leu Leu Pro Pro Ser Arg
       115
<210> 2505
<211> 540
<212> DNA
<213> Homo sapiens
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tggcgatect caegacgatg ggageggetg ggecegaggg ettgaeggte teetecetgg
420
eqteqqtqte aqteqteecq qetqttqtqt eggtqteqtt gggtaatggt tegaegaece
tggccaccct gacggaggag teccgcgtca tegtecacat gettgatgca gategegege
540
<210> 2506
<211> 72
<212> PRT
<213> Homo sapiens
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Ser Gly Ala Asn Pro Thr Gln Ala Leu Val Trp Ser Gln Val Leu Leu
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1
                 5
                                    10
Ser Met Gly Leu Pro Leu Val Leu Val Pro Leu Ala Arg Phe Thr Gly
Asp Arg Arg Leu Met Gly Gln Trp Thr Asn Gly Arg Val Met Ala Ala
                            40
Ile Ala Trp Ile Val Val Ala Ala Val Ser Ala Leu Asn Val Val Leu
                                            60
Val Val Glu Thr Val Met Gly Ala
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<211> 922
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His Trp His Phe Leu Asn Gln Arg Arg Arg Pro Leu Arg Arg Arg
Asp Gly Thr Phe Asn Tyr Ser Pro Asp Val Tyr Cys Ser Lys Tyr Asn
Glu Ala Thr Gly Val Cys Pro Asp Gly Asp Glu Cys Pro Tyr Leu His
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                   70
Arg Thr Thr Gly Asp Thr Glu Arg Lys Tyr His Leu Arg Tyr Tyr Lys
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Thr Gly Thr Cys Ile His Glu Thr Asp Ala Arg Gly His Cys Val Lys
                              105
Asn Gly Leu His Cys Ala Phe Ala His Gly Pro His Asp Leu Arg Ser
Pro Val Tyr Asp Ile Arg Glu Leu Gln Ala Met Glu Ala Leu Gln Asn
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Gly Gln Thr Thr Val Glu Gly Ser Ile Glu Gly Gln Ser Ala Gly Ala
                   150
                                      155
Ala Ser His Ala Met Ile Glu Lys Ile Leu Ser Glu Glu Pro Arg Trp
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               165
Gln Glu Thr Ala Tyr Val Leu Gly Asn Tyr Lys Thr Glu Pro Cys Lys
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Lys Pro Pro Arg Leu Cys Arg Gln Gly Tyr Ala Cys Pro Tyr Tyr His
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Asn Ser Lys Asp Arg Arg Arg Ser Pro Arg Lys His Lys Tyr Arg Ser
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Ser Pro Cys Pro Asn Val Lys His Gly Asp Glu Trp Gly Asp Pro Gly
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                   230
Lys Cys Glu Asn Gly Asp Ala Cys Gln Tyr Cys His Thr Arg Thr Glu
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Gln Gln Phe His Pro Glu Ile Tyr Lys Ser Thr Lys Cys Asn Gly Arg
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Gly Gly Gly Val Arg Glu
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cggcaggttg ccgagggcaa acacgttgac cacgttcgca ccgacaccac cgaccacggc
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caccgctccc agcggaatct cgtagactta gcgccagggt tggtaaggcg tgtagcggtc

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Val His Glu Arg Val Glu Pro Gly Lys Thr Glu Thr Gln Pro Ile Leu
Gly Asp Ala Gly Arg Gln Val Ala Glu Gly Lys His Val Asp His Val
Arg Thr Asp Thr Thr Asp His Gly His Arg Ser Gln Arg Asn Leu Val
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Asp Leu Ala Pro Gly Leu Val Arg Arg Val Ala Val Val Thr Thr Gly
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663
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Pro Gln Ala Ala Asp Glu Tyr Tyr Gln Leu Leu Leu Ala Leu Arg Pro
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Gly Arg Val Ala Gly Leu Ala Glu Ile Val Val Asn Gly Gln Pro Phe
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Thr Val Thr Asp Ala Thr Glu Asp Glu Leu Ala Leu Thr Ala Trp Ala
Arg Ile Leu Leu Glu Gly Thr Pro Ile Ala Met Asp Gly Ser Trp Gln
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Leu His Arg Arg Arg Ala Ala Pro Glu Pro Val Arg Phe Ala Lys Arg
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Phe Gly Gly Glu Gln Ser Asn Thr Ser Ile Met Val Gly Asp Ala Ile
                                             140
                        135
Ile Ile Lys Met Phe Arg Arg Leu Glu Pro Gly Asp Asn Leu Asp Ile
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                    150
Thr Val His Ser Ala Leu Asn Asp Ala Gly Ile Ser Ser Val Ala Thr
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Leu Tyr Gly Phe Met Ser Gly Gln Ile Pro Ala Glu Glu His Ile Pro
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Val Asp Leu Ala Met Ile Ile Glu Arg Leu Pro Gln Pro Arg Asp Gly
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Val Gln Thr Ala Leu Arg Ser Glu Asp Tyr Glu Gln Ala Ala His
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Gln Gly Lys Glu Gly Gln His Pro Lys Leu Glu His Asp
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351
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Pro Glu Gly Gly Arg Lys Ser Leu Leu Pro Pro Ser Pro Thr Gly Asn.
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Ala Ala Gly Gly Leu Arg Glu Ala Thr Gln Trp Gly Ala Leu Gly Ala
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Gly Gly Gln Thr Met Gly Gln His Thr Pro Ser Ala Pro Leu Gln Tyr
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Pro Asn Pro Met Gly Leu Phe Ser Ser Pro Asn Leu Ala Gly Leu Ala
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Glu Ala Thr His Ser Leu Gly Thr Glu Leu Gln Gly Ala Gly Ser Leu
                        55
Ser Arg Lys Arg Pro Val Leu Ser Gly Gln Cys Leu Thr Pro Ala Pro
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                                         75
Pro Ser Gln Ala Ser Ser Ser His Leu Pro Gln Ser Phe Pro Ser Arg
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Pro Ser Ser Thr Gly Gln Thr
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Gly Trp Gly Val Ala Gly Arg Gly Ser Ser Arg Pro Glu Ser Gln Ser
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Arg Trp Arg Ala Ala Ser Thr Arg Phe Leu Leu Val Gly Leu Arg Gln
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Cys Ser Gly Ala Ala Thr Pro Thr Pro Ser Leu Pro Pro Pro Pro Ala
Asn Asp Ser Asp Thr Ser Thr Gly Gly Cys Gln Gly Ser Tyr Arg Cys
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GIn	Pro	GIY	vai		Leu	Pro	vai	Trp	90	PIO	АБР	wsb	PIO	Ser 95	Leu
<b>01</b>	•	T	21.0	85	λ ~ <i>~</i>	71-	W-1	17-1		Dha	V=1	בומ	Met	Val	ጥህ ዮ
GIY	Asp	гуѕ		Ala	Arg	ALA	val	105	ı yı.	2 110	, m	ALG	110		-1-
	Db -	•	100	1701	C 0 ==	T10	т1.		n en	λνα	Dhe	Mot		Ala	Tle
met	Pne		GIY	vai	Ser	116	120	ніа	ASP	ALG	FIIC	125	ALG	niu	
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GIu		тте	THE	Ser	Lys		гÀг	GIU	TIE	1111	140	1111	шуз	Ata	AJII
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Asn	Leu	inr	Leu		Ald	neu	Gry	Ser	170	AIG	FIO	GIU	***	175	u
0	17- 3	<b>71</b> -	<b>a</b> 1	165	C	C1	ui a	7.00		Cln	בות	Glv	Glu	Leu	Glv
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PIO	GIŸ		116	Val	Gry	Ser	200	AIA	FILE	ASII	1-16-6	205	V 44.1	· · · ·	
77.	110 7	195	т1 о	т	1751	Tlo		ת ז ת	Clv	Glu	Sar		Lvs	Ile	Lvs
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uio		A ~~	Val	Dhe	Dhe		Thr	Δla	Ser	Trn		Tle	Phe	Ala	Tvr
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Leu			340					345			•		350		
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Ala Arg 385 Arg	Lys Asn 370 Ile His	Gln 355 Tyr Gln Ala	340 Lys Tyr Ala Ala	His Ala Thr Asp 405	Pro Leu Arg 390 Ala	Asp Leu 375 Leu Ser	Lys 360 His Met	345 Asp Gln Thr	Leu Gln Gly Ala 410	Glu Lys Ala 395 Ala	Gln Ser 380 Gly Pro	Leu 365 Arg Asn	350 Val Ala Val Glu Glu	Gly Phe Leu Gly 415	Ile Tyr Arg 400
Ala Arg 385 Arg Gly	Lys Asn 370 Ile His Glu	Gln 355 Tyr Gln Ala Asp	340 Lys Tyr Ala Ala Glu 420	His Ala Thr Asp 405 Asp	Pro Leu Arg 390 Ala Asp	Asp Leu 375 Leu Ser Gly	Lys 360 His Met Arg	345 Asp Gln Thr Arg Ser 425	Leu Gln Gly Ala 410 Arg	Glu Lys Ala 395 Ala Ile	Gln Ser 380 Gly Pro	Leu 365 Arg Asn Ala Phe	350 Val Ala Val Glu Glu 430	Gly Phe Leu Gly 415 Pro	Ile Tyr Arg 400 Ala Ser
Ala Arg 385 Arg Gly	Lys Asn 370 Ile His Glu	Gln 355 Tyr Gln Ala Asp	340 Lys Tyr Ala Ala Glu 420	His Ala Thr Asp 405 Asp	Pro Leu Arg 390 Ala Asp	Asp Leu 375 Leu Ser Gly	Lys 360 His Met Arg	345 Asp Gln Thr Arg Ser 425	Leu Gln Gly Ala 410 Arg	Glu Lys Ala 395 Ala Ile	Gln Ser 380 Gly Pro	Leu 365 Arg Asn Ala Phe Leu	350 Val Ala Val Glu Glu 430	Gly Phe Leu Gly 415 Pro	Ile Tyr Arg 400 Ala
Ala Arg 385 Arg Gly Leu	Lys Asn 370 Ile His Glu Tyr	Gln 355 Tyr Gln Ala Asp His 435	340 Lys Tyr Ala Ala Glu 420 Cys	His Ala Thr Asp 405 Asp	Pro Leu Arg 390 Ala Asp Glu	Asp Leu 375 Leu Ser Gly Asn	Lys 360 His Met Arg Ala Cys 440	345 Asp Gln Thr Arg Ser 425 Gly	Leu Gln Gly Ala 410 Arg Ser	Glu Lys Ala 395 Ala Ile Val	Gln Ser 380 Gly Pro Phe Leu	Leu 365 Arg Asn Ala Phe Leu 445	350 Val Ala Val Glu Glu 430 Ser	Gly Phe Leu Gly 415 Pro Val	Ile Tyr Arg 400 Ala Ser
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Ala Arg 385 Arg Gly Leu Cys	Lys Asn 370 Ile His Glu Tyr Gln 450	Gln 355 Tyr Gln Ala Asp His 435 Gly	340 Lys Tyr Ala Ala Glu 420 Cys	His Ala Thr Asp 405 Asp Leu Glu	Pro Leu Arg 390 Ala Asp Glu Gly	Asp Leu 375 Leu Ser Gly Asn Asn 455	Lys 360 His Met Arg Ala Cys 440 Ser	345 Asp Gln Thr Arg Ser 425 Gly Thr	Leu Gln Gly Ala 410 Arg Ser	Glu Lys Ala 395 Ala Ile Val	Gln Ser 380 Gly Pro Phe Leu Val 460	Leu 365 Arg Asn Ala Phe Leu 445 Asp	Ala Val Glu Glu 430 Ser	Gly Phe Leu Gly 415 Pro Val Arg	Ile Tyr Arg 400 Ala Ser Thr
Ala Arg 385 Arg Gly Leu Cys	Lys Asn 370 Ile His Glu Tyr Gln 450	Gln 355 Tyr Gln Ala Asp His 435 Gly	340 Lys Tyr Ala Ala Glu 420 Cys	His Ala Thr Asp 405 Asp Leu Glu	Pro Leu Arg 390 Ala Asp Glu Gly Lys	Asp Leu 375 Leu Ser Gly Asn Asn 455	Lys 360 His Met Arg Ala Cys 440 Ser	345 Asp Gln Thr Arg Ser 425 Gly Thr	Leu Gln Gly Ala 410 Arg Ser	Glu Lys Ala 395 Ala Ile Val Tyr	Gln Ser 380 Gly Pro Phe Leu Val 460	Leu 365 Arg Asn Ala Phe Leu 445 Asp	Ala Val Glu Glu 430 Ser	Gly Phe Leu Gly 415 Pro Val Arg	Ile Tyr Arg 400 Ala Ser Thr Thr
Ala Arg 385 Arg Gly Leu Cys Glu 465	Lys Asn 370 Ile His Glu Tyr Gln 450 Asp	Gln 355 Tyr Gln Ala Asp His 435 Gly	340 Lys Tyr Ala Ala Glu 420 Cys Gly Ser	His Ala Thr Asp 405 Asp Leu Glu Ala	Pro Leu Arg 390 Ala Asp Glu Gly Lys 470	Asp Leu 375 Leu Ser Gly Asn Asn 455 Ala	Lys 360 His Met Arg Ala Cys 440 Ser	345 Asp Gln Thr Arg Ser 425 Gly Thr	Leu Gln Gly Ala 410 Arg Ser Phe Asp	Glu Lys Ala 395 Ala Ile Val Tyr Tyr 475	Gln Ser 380 Gly Pro Phe Leu Val 460 Glu	Leu 365 Arg Asn Ala Phe Leu 445 Asp	350 Val Ala Val Glu 430 Ser Tyr	Gly Phe Leu Gly 415 Pro Val Arg Glu	Ile Tyr Arg 400 Ala Ser Thr Thr Gly 480
Ala Arg 385 Arg Gly Leu Cys Glu 465	Lys Asn 370 Ile His Glu Tyr Gln 450 Asp	Gln 355 Tyr Gln Ala Asp His 435 Gly	340 Lys Tyr Ala Ala Glu 420 Cys Gly Ser	His Ala Thr Asp 405 Asp Leu Glu Ala Lys	Pro Leu Arg 390 Ala Asp Glu Gly Lys 470	Asp Leu 375 Leu Ser Gly Asn Asn 455 Ala	Lys 360 His Met Arg Ala Cys 440 Ser	345 Asp Gln Thr Arg Ser 425 Gly Thr	Leu Gln Gly Ala 410 Arg Ser Phe Asp Gln	Glu Lys Ala 395 Ala Ile Val Tyr Tyr 475	Gln Ser 380 Gly Pro Phe Leu Val 460 Glu	Leu 365 Arg Asn Ala Phe Leu 445 Asp	350 Val Ala Val Glu 430 Ser Tyr	Gly Phe Leu Gly 415 Pro Val Arg Glu Ile	Ile Tyr Arg 400 Ala Ser Thr Thr
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Solidary
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Val       Thr       11e       Leu       Asp       Asp       Asp       His       Ala       Gly       Ile       Phe       Ser       Phe       Gln       Asp       550       Fro       555       Fro       Fro       Phe       Gln       Asp       550       Fro       550       Fro       550       550       550       550       Fro       550       5
Val Thr         Ile Leu Asp Asp Asp Asp Ssp His Ala Gly Ile Phe Ser Phe Gln Asp 545         Ser Ser Ser Ser Ser Gly Cys Met Gly Thr Val Asp Val Arg Val Ser Ser Ser Ser Ser Ser Gly Cys Met Gly Thr Val Asp Val Arg Val Ser Ser Ser Gly Ala Arg Gly Thr Ser Ser Ser Ser Gly Ala Arg Gly Thr Ser Ser Ser Ser Gly Ala Arg Gly Thr Ser Ser Ser Ser Ser Ser Ser Ser Gly Ala Arg Gly Thr Ser Ser Ser Ser Ser Gly Ala Arg Gly Gly Val His Tyr Glu Asp Ala Cys Ser
545         550         550         550         550         550         560         Arg         Gly         Thr         Val         Asp         Val         Arg         Val         565         570         Thr         Val         Asp         Val         Arg         Val         Arg         Thr         Arg         Thr         Val         Arg         Thr         Arg         Arg         Thr         Arg         Arg         Thr         Arg
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Leu Asn Gln Gly Asp Gly Asp Gly Asp Edg Lys Leu Thr Ala Glu Glu Glu Glu Glu Glu Ala Arg Arg Arg Ile Ala Glu Met Gly Lys Pro Val Leu Gly Glu Glu Asn Cys 675
Leu Asn Gln Gly Asp Gly Asp Arg Lys Leu Thr Ala Glu Glu Glu Glu Glu Ala Arg Arg Arg Ile Ala Glu Met Gly Lys Pro Val Leu Gly Glu Asn Cys 675 - 675 - 68
Ala Arg Arg Ile Ala Glu Met Gly Lys Pro Val Leu Gly Glu Asn Cys 675  Arg Leu Glu Val Ile Ile Glu Glu Ser Tyr Asp Phe Lys Asn Thr Val 690  Asp Lys Leu Ile Lys Lys Thr Asn Leu Ala Leu Val Ile Gly Thr His 705  Ser Trp Arg Glu Gln Phe Leu Glu Ala Ile Thr Val Ser Ala Gly Asp Asp Fro Lys Lys Tyr Asp Fro Tyr
Ala Arg Arg Ile Ala Glu Met Gly Lys Pro Val Leu Gly Glu Asn Cys 675
Arg Leu Glu Val Ile Ile Glu Glu Ser Tyr Asp Phe Lys Asn Thr Val 690 Lys Leu Ile Lys Thr Asn Leu Ala Leu Val Ile Gly Thr His 705 Leu Trp Arg Glu Gln Phe Leu Glu Ala Ile Thr Val Ser Trp Arg Glu Gln Phe Leu Glu Ala Ile Thr Val Ser Ala Gly Asp 735 Leu Trp Try
690
Asp Lys Leu Ile Lys Lys Thr Asn Leu Ala Leu Val Ile Gly Thr His 705 710 710 715 715 720 720 Ser Trp Arg Glu Gln Phe Leu Glu Ala Ile Thr Val Ser Ala Gly Asp 725 735 735
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725 730 735
Glu Glu Glu Glu Glu Asp Gly Ser Arg Glu Glu Arg Leu Pro Ser Cys
740 745 750
Phe Asp Tyr Val Met His Phe Leu Thr Val Phe Trp Lys Val Leu Phe
755 760 765
Ala Cys Val Pro Pro Thr Glu Tyr Cys His Gly Trp Ala Cys Phe Gly 770 775 780
Val Ser Ile Leu Val Ile Gly Leu Leu Thr Ala Leu Ile Gly Asp Leu
785 790 795 800
Ala Ser His Phe Gly Cys Thr Val Gly Leu Lys Asp Ser Val Asn Ala 805 810 815
Val Val Phe Val Ala Leu Gly Thr Ser Ile Pro Asp Thr Phe Ala Ser
820 825 830
Lys Val Ala Ala Leu Gln Asp Gln Cys Ala Asp Ala Ser Ile Gly Asn 835 840 845
Val Thr Gly Ser Asn Ala Val Asn Val Phe Leu Gly Leu Gly Val Ala
850 855 860 Trp Ser Val Ala Ala Val Tyr Trp Ala Val Gln Gly Arg Pro Phe Glu
865 870 875 880
Val Arg Thr Gly Thr Leu Ala Phe Ser Val Thr Leu Phe Thr Val Phe
885 890 895
Ala Phe Val Gly Ile Ala Val Leu Leu Tyr Arg Arg Pro His Ile
900 905 910
Gly Gly Glu Leu Gly Gly Pro Arg Gly Pro Lys Leu Ala Thr Thr Ala 915 920 925
Leu Phe Leu Gly Leu Trp Leu Leu Tyr Ile Leu Phe Ala Ser Leu Glu

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Thr Thr Ala Gly Arg Ile His Gly Asn Gln Leu Ile His His Ser Asp
Arg Gly Ser Gln Tyr Val Ser Leu Lys Tyr Ser Thr Ala Leu Ala Glu
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Ser Gly Ile Arg Pro Ser Val Gly Thr Val Gly Asp Ser Tyr Asp Asn
Ala Leu Ala Glu Thr Val Asn Gly Leu Tyr Lys Ala Glu Leu Ile His
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Ile Ser Asp Ile Ser Thr Thr Gly Ala Ser Phe Arg Ser Ala His Arg
Leu Gly Ser Gln Arg Cys Ala Arg Thr Pro Ala Ile Ser Gly Glu Asp
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180
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Ser Ser Ser Gln Pro Asp His Gly Arg Leu Ser Pro Pro Glu Ala Pro
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Asp Arg Pro Thr Ile Ser Thr Ala Ser Glu Thr Ser Val Tyr Val Thr
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Tyr Thr Arg Val Thr Ala Glu Thr Arg Arg Ser Lys Pro Gly Asp Thr
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Glu Ser Arg Glu Leu Ser Cys Asn Ala Ser Asn Pro Leu Gly Leu Asn
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Ser Phe Pro Arg Glu Thr Arg Ser Thr Val Arg Ser Gln Gly Pro Pro
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105

100

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Lys Ser Glu Glu Leu Gln Arg Leu Thr Ala Ser Glu Pro Leu Thr Leu
Glu Gln Glu Tyr Ala Met Gln Cys Ser Trp Gln Glu Asp Ala Asp Lys
Cys Thr Phe Ile Val Leu Asp Ala Glu Lys Trp Gln Ala Gln Pro Gly
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Ala Thr Glu Glu Ser Cys Met Val Gly Asp Val Asn Leu Phe Leu Thr
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Asp Leu Glu Asp Pro Thr Leu Gly Glu Ile Glu Val Met Ile Ala Glu
Pro Ser Cys Arg Gly Lys Gly Leu Gly Thr Glu Ala Val Leu Ala Met
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Leu Ser Tyr Gly Val Thr Thr Leu Gly Leu Thr Lys Phe Glu Ala Lys
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Ile Gly Gln Gly Asn Glu Pro Ser Ile Arg Met Phe Gln Lys Leu His
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Phe Glu Gln Val Ala Thr Ser Ser Val Phe Gln Glu Val Thr Leu Arg
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Thr Arg Ser Arg Lys Asp Lys Leu Asp Ala Glu Val His Ala Gly Glu
                                    10
Gly Thr Pro Gly Asp Val Ile Val Leu Arg Phe Ser Gly Ala Met Ala
Lys Arg Pro Ala Ser Val Ile Leu Pro Leu Leu Leu Ser Asp Ser Pro
                            40
Val Ile Ala Trp Trp Pro Phe Ser Gly Pro Asp Asn Leu Ala Ser Asp
                                            60
Pro Ile Gly Ala Leu Ala Asp Arg Ile Thr Asp Ser Ala Ala Asp
Lys Asp Pro Cys Lys Ala Leu Ile Arg Arg Ala Ala His Leu Thr Glu
                                    90
Gly Asp Ser Asp Leu Cys Trp Ala Arg Thr Thr Ser Trp Arg Ala Leu
                                105
Ala Ala Ala Leu Asp Gln His Pro Ala Thr Val Lys Phe Ala Arg
                            120
Val Glu Ser Ala Ala Gly Asn Ala Pro Ala Met Leu Leu Ala Ala Trp
Leu Gly Leu Arg Leu Gly Val Pro Val Glu Arg Val Thr Thr Asp Ala
                                                             160
                                        155
                    150
Pro Gly Ile Ser Ala Ile Val Met Ser
                165
<210> 2539
<211> 453
<212> DNA
<213> Homo sapiens
<400> 2539
aagettetae tgeegegage aegtegteea eegtegaggt catggtteta gtttgeegeg
togoggcatg accogaggat agtgacgtgg gacaatggct acgtgcgttt totcaacgag
cagoogaact acgacotgac gtatgacgac gtottcatgg caccaaaccg ttootcggtg
180
```

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gggtcccqca tgaacgtcga cctcacgtca acagacgggc taggcactcc tctgcccctc
gtagtggcca atatgaccgc aatttccgga cgtcgcatgg cagagaccat cgccaggcgc
ggaggcattg ctgttctgcc ccaagatatc ccggcggatt tcgtcgcccg gtccattcgg
cgcgtcaaag atgcgcatac tcgattcgac accccagtca ccgtcaaccc gacaacgact
gtcggtgagg ccatgaactt gctcaacaag cgc
453
<210> 2540
<211> 134
<212> PRT
<213> Homo sapiens
<400> 2540
Phe Ala Ala Ser Arg His Asp Pro Arg Ile Val Thr Trp Asp Asn Gly
Tyr Val Arg Phe Leu Asn Glu Gln Pro Asn Tyr Asp Leu Thr Tyr Asp
                                25
Asp Val Phe Met Ala Pro Asn Arg Ser Ser Val Gly Ser Arg Met Asn
Val Asp Leu Thr Ser Thr Asp Gly Leu Gly Thr Pro Leu Pro Leu Val
Val Ala Asn Met Thr Ala Ile Ser Gly Arg Arg Met Ala Glu Thr Ile
Ala Arg Arg Gly Gly Ile Ala Val Leu Pro Gln Asp Ile Pro Ala Asp
Phe Val Ala Arg Ser Ile Arg Arg Val Lys Asp Ala His Thr Arg Phe
                                105
           100
Asp Thr Pro Val Thr Val Asn Pro Thr Thr Val Gly Glu Ala Met
                            120
Asn Leu Leu Asn Lys Arg
    130
<210> 2541
<211> 564
<212> DNA
<213> Homo sapiens
<400> 2541
acceptate cacegoagtte tettectea egtactecae tetaacaac tetaaateca
ccctgcatgg aacccattgc agggcacacg cagtctacat gtatcccagg ttttatgctc
acagagectg caatacteeg tgtetggaat acgttatttg etgeacacet eecagaggaa
catgtaacgt ctgtgtaaca tgctatcctg cacacatctg aaagaatctg tgtacacaac
actattatgc tgtgcacaca tttcctcata ttctgtgtag agagcacctc attttgtact
caaatattcg gcttccataa caagttacat tgctcacatc ttaaaatatt cattacacgt
```

```
qaaaccaccq catqqtaccq acatccttct ggaatgtccc gcacagaggc tgatatatgt
geacagttet caetgttetg egtgeecage ceetcacaet ggaegeecae etcacaetet
totgccaagg gagactitgg tictcccctt cootgtgctg gotgtgcggg ccacagtcct
ctgcacgcca gcagcatgac gcgt
564
<210> 2542
<211> 106
<212> PRT
<213> Homo sapiens
<400> 2542
Met Leu Cys Thr His Phe Leu Ile Phe Cys Val Glu Ser Thr Ser Phe
Cys Thr Gln Ile Phe Gly Phe His Asn Lys Leu His Cys Ser His Leu
Lys Ile Phe Ile Thr Arg Glu Thr Thr Ala Trp Tyr Arg His Pro Ser
                            40
Gly Met Ser Arg Thr Glu Ala Asp Ile Cys Ala Gln Phe Ser Leu Phe
                        55
Cys Val Pro Ser Pro Ser His Trp Thr Pro Thr Ser His Ser Ser Ala
                    70
Lys Gly Asp Phe Gly Ser Pro Leu Pro Cys Ala Gly Cys Ala Gly His
                                    90
Ser Pro Leu His Ala Ser Ser Met Thr Arg
            100
                                105
<210> 2543
<211> 387
<212> DNA
<213> Homo sapiens
<400> 2543
cqcctqaaqq qqqcqqqqaa aatggaatgg gggggaaggg cgcgggtggg gacatgctgg
aacgtgccca tgctttctgc accacactgg atgactgaag gggaaggaac gagcgtctta
ccgctcctga tgagattttt gtttttgcct aacaaagaaa tgtgtatgaa tgcacgtctg
tttgcagggg cagggaggag gagggtcctt ggaatagctg ccgacaacag ctggaactcc
tgtctgggtc ccccagctgg gctagagagg gcagtgatca tctgtccact ggacaggaag
gtttgcaaag ggctgtttgc ttactgggtc ccaattttta gccttctgaa gcccctgtcc
aatggggccc agcaggcagc agtgctg
387
<210> 2544
<211> 122
<212> PRT
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<213> Homo sapiens <400> 2544 Met Glu Trp Gly Gly Arg Ala Arg Val Gly Thr Cys Trp Asn Val Pro Met Leu Ser Ala Pro His Trp Met Thr Glu Gly Glu Gly Thr Ser Val Leu Pro Leu Leu Met Arg Phe Leu Phe Leu Pro Asn Lys Glu Met Cys Met Asn Ala Arg Leu Phe Ala Gly Ala Gly Arg Arg Arg Val Leu Gly 55 Ile Ala Ala Asp Asn Ser Trp Asn Ser Cys Leu Gly Pro Pro Ala Gly 70 Leu Glu Arg Ala Val Ile Ile Cys Pro Leu Asp Arg Lys Val Cys Lys 90 Gly Leu Phe Ala Tyr Trp Val Pro Ile Phe Ser Leu Leu Lys Pro Leu Ser Asn Gly Ala Gln Gln Ala Ala Val Leu <210> 2545 <211> 336 <212> DNA <213> Homo sapiens <400> 2545 gegättattt tegtgetgee eggaettate atggtegget ggtggteagg ttteeegtae tggaccaccc tegetatetg tetagtegge ggeateeteg gegttatgta etegatteeg ctgcgtcggg ccctcgtgac aggctcggat cttccctacc cggagggcgt cgcaggagct gaggtgetea aagtaggega tteegetggt geegeegagg etaacaaggt gggtetgega gtcatcatcg tcggttctgt ggtctctgca gcgtacgccc tgttgtcgga tcttaagctt gtgaagtcgg cgctgaccaa gcctttcaag acgggc

<210> 2546

336

<211> 112

<212> PRT

<213> Homo sapiens

<400> 2546

Ala Ile Ile Phe Val Leu Pro Gly Leu Ile Met Val Gly Trp Trp Ser Gly Phe Pro Tyr Trp Thr Leu Ala Ile Cys Leu Val Gly Gly Ile Leu Gly Val Met Tyr Ser Ile Pro Leu Arg Arg Ala Leu Val Thr Gly Ser Asp Leu Pro Tyr Pro Glu Gly Val Ala Gly Ala Glu Val Leu Lys Val Gly Asp Ser Ala Gly Ala Ala Glu Ala Asn Lys Val Gly Leu Arg

```
65
                                        75
                                                             80
Val Ile Ile Val Gly Ser Val Val Ser Ala Ala Tyr Ala Leu Leu Ser
Asp Leu Lys Leu Val Lys Ser Ala Leu Thr Lys Pro Phe Lys Thr Gly
                                105
<210> 2547
<211> 556
<212> DNA
<213> Homo sapiens
<400> 2547
acgegtgeac acacacaca geaggegtac acgeteacaa gtgeacacae acatatgagt
ttcccacaca tctcaccata tcactttctc tttacttttt aaagacaggg cacttgccct
tatggccaat aatattatgc ccaagctaca acattccgag tcaatcacaa aggttataaa
cttcatttga actgaagacc acctgtaagc acgcagctca aatgttctca cctagaaatt
caagttgtgt ttggaaagtg gacttaacgg tcaaagaaaa aggcctggcc aacttcagag
agggacaccc agccctgcta cgttgcgtgt cattatgtgg tgctgtgcta tccatagaga
aagaggagat gaaaaagatt ctacaaagag agatcaaact gcaagaaagc acaaagattt
catcaccaca atatgaaggc ctccttggta taaatgactt ttttaggtcc caataagaaa
taccatctat tctatctgga attattttat tagcttcaaa ttttattcta agattcatac
tatcagatca tctaga
556
<210> 2548
<211> 106
<212> PRT
<213> Homo sapiens
<400> 2548
Met Asn Leu Arg Ile Lys Phe Glu Ala Asn Lys Ile Ile Pro Asp Arg
Ile Asp Gly Ile Ser Tyr Trp Asp Leu Lys Lys Ser Phe Ile Pro Arg
Arg Pro Ser Tyr Cys Gly Asp Glu Ile Phe Val Leu Ser Cys Ser Leu
                            40
Ile Ser Leu Cys Arg Ile Phe Phe Ile Ser Ser Phe Ser Met Asp Ser
Thr Ala Pro His Asn Asp Thr Gln Arg Ser Arg Ala Gly Cys Pro Ser
                                        75
Leu Lys Leu Ala Arg Pro Phe Ser Leu Thr Val Lys Ser Thr Phe Gln
                85
Thr Gln Leu Glu Phe Leu Gly Glu Asn Ile
            100
                                105
```

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<210> 2549
<211> 435
<212> DNA
<213> Homo sapiens
<400> 2549
nnccagecte teteegaceg egtacgtatt gaatttgata aagaagecaa caeggttgtt
atcgatgata atggtgtcgg catgtctcgt gaagaagcca ttacaaactt aggtacgatt
gctaaatcgg gcacctcttc tttcttagag caattgagtg gcgatcagaa aaaagacagc
caacttattg gtcaattcgg tgtaggcttt tactctgctt tcatcgttgc tgataaagta
acagtagaaa cacgtcgcgc aggtgcgacg gaaaatgaag cggttcgctg ggtatctgat
ggttctggtg aatttactat tgagacgatc gataaagcga ctcgtggtac acgcattact
ttgcatctga aagcagatga aaaagatttc gcagacaact tccgtctacg ttcattagta
420
acaaaatatt ctgat
435
<210> 2550
<211> 145
<212> PRT
<213> Homo sapiens
<400> 2550
Xaa Gln Pro Leu Ser Asp Arg Val Arg Ile Glu Phe Asp Lys Glu Ala
Asn Thr Val Val Ile Asp Asp Asn Gly Val Gly Met Ser Arg Glu Glu
Ala Ile Thr Asn Leu Gly Thr Ile Ala Lys Ser Gly Thr Ser Ser Phe
                            40
Leu Glu Gln Leu Ser Gly Asp Gln Lys Lys Asp Ser Gln Leu Ile Gly
Gln Phe Gly Val Gly Phe Tyr Ser Ala Phe Ile Val Ala Asp Lys Val
Thr Val Glu Thr Arg Arg Ala Gly Ala Thr Glu Asn Glu Ala Val Arg
                                    90
Trp Val Ser Asp Gly Ser Gly Glu Phe Thr Ile Glu Thr Ile Asp Lys
                                105
Ala Thr Arg Gly Thr Arg Ile Thr Leu His Leu Lys Ala Asp Glu Lys
                            120
Asp Phe Ala Asp Asn Phe Arg Leu Arg Ser Leu Val Thr Lys Tyr Ser
   130
                        135
Asp
145
<210> 2551
<211> 403
<212> DNA
<213> Homo sapiens
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<400> 2551
nnqccqqcca gcctcacatc agtctctccg ccccggggaa ggctcagcac tttaaatcga
ggactccact tetggggacg cetggttegt tegeceacea ggeetagget aegeteeatg
ctccccage aatetetgte tacacetect geggegeett geeeteetee gacecettte
cagocannaa gtoccoccac coettoagag aagcagooto aaattocaga agtggaggot
ccagectece egegaggtae cagececaea gtettetggg agecattgtg gecagggaeg
gcctctggac tgccaggctg ggttggggac cagggaacat cggtctactc aggtgtgagg
gggcaggtct ggcctgcccc aaagttggct ccatcctgga can
<210> 2552
<211> 134
<212> PRT
<213> Homo sapiens
<400> 2552
Xaa Pro Ala Ser Leu Thr Ser Val Ser Pro Pro Arg Gly Arg Leu Ser
Thr Leu Asn Arg Gly Leu His Phe Trp Gly Arg Leu Val Arg Ser Pro
                                25
Thr Arg Pro Arg Leu Arg Ser Met Leu Pro Gln Gln Ser Leu Ser Thr
Pro Pro Ala Ala Pro Cys Pro Pro Pro Thr Pro Phe Gln Pro Xaa Ser
Pro Pro Thr Pro Ser Glu Lys Gln Pro Gln Ile Pro Glu Val Glu Ala
                    70
                                        75
Pro Ala Ser Pro Arg Gly Thr Ser Pro Thr Val Phe Trp Glu Pro Leu
                                    90
Trp Pro Gly Thr Ala Ser Gly Leu Pro Gly Trp Val Gly Asp Gln Gly
                                105
Thr Ser Val Tyr Ser Gly Val Arg Gly Gln Val Trp Pro Ala Pro Lys
                            120
Leu Ala Pro Ser Trp Thr
    130
<210> 2553
<211> 380
<212> DNA
<213> Homo sapiens
<400> 2553
actagtgtcc ctataagaaa aggaaaggac caagacacag gaaagatgaa gcagagattg
gagagataca gcatgggcca aggagcactg ggagccagca gcagctggaa gaggcaggag
gcatcctccc tagaccgcac aggatgctac tgggtgagcc tgctgtcctg gaaaaggcgt
180
```

```
gaagtetgee tgagtgggea ggggettetg egeageacee ageaaggeea aggtggaagg
gaccetectg geocetgice tggetecace eteagetget ggeaggiggg teaccaggee
totgoccaaa gaaactootg caggoagoto tggaccooot gtottacaca cottotcact
gagcetgeca geateceagn
380
<210> 2554
<211> 111
<212> PRT
<213> Homo sapiens
<400> 2554
Met Lys Gln Arg Leu Glu Arg Tyr Ser Met Gly Gln Gly Ala Leu Gly
Ala Ser Ser Ser Trp Lys Arg Gln Glu Ala Ser Ser Leu Asp Arg Thr
Gly Cys Tyr Trp Val Ser Leu Leu Ser Trp Lys Arg Arg Glu Val Cys
Leu Ser Gly Gln Gly Leu Leu Arg Ser Thr Gln Gln Gly Gln Gly Gly
Arg Asp Pro Pro Gly Pro Cys Pro Gly Ser Thr Leu Ser Cys Trp Gln
                                         75
Val Gly His Gln Ala Ser Ala Gln Arg Asn Ser Cys Arg Gln Leu Trp
                                    90
Thr Pro Cys Leu Thr His Leu Leu Thr Glu Pro Ala Ser Ile Pro
                                105
            100
<210> 2555
<211> 368
<212> DNA
<213> Homo sapiens
<400> 2555
ntccggatgg aaaagtaaag accagcaata gccaataacg ccattaacac atacccatat
atgttgttaa tgctgcccgg tagttcggtg gcattcttca tgggcaatag tttaatggga
gataacgcga ataatggtag tgtcgttcta gtgctcacag acctggtcac ccaaatagaa
ggatttatat cotoccatat cotoattttt gtgctcgttg gcctcggcat tgtctttacc
gttgccactc gaggtgtaca gttccgcctc ttcgggcaca tgtggcacct catgctcgat
tcacggaagc aaaagggcac ctccctctcc agctctcaag cattcacagt gggtctcgat
360
cacgcggn
368
<210> 2556
<211>.102
<212> PRT
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## <213> Homo sapiens <400> 2556 Met Leu Leu Met Leu Pro Gly Ser Ser Val Ala Phe Phe Met Gly Asn Ser Leu Met Gly Asp Asn Ala Asn Asn Gly Ser Val Val Leu Val Leu Thr Asp Leu Val Thr Gln Ile Glu Gly Phe Ile Ser Ser His Ile Leu Ile Phe Val Leu Val Gly Leu Gly Ile Val Phe Thr Val Ala Thr Arg Gly Val Gln Phe Arg Leu Phe Gly His Met Trp His Leu Met Leu Asp 70 75 Ser Arg Lys Gln Lys Gly Thr Ser Leu Ser Ser Ser Gln Ala Phe Thr 90 85 Val Gly Leu Asp His Ala 100 <210> 2557 <211> 408 <212> DNA <213> Homo sapiens <400> 2557 atcactactc cagttggtga ggcagttctg ggtcgcatct taaatgtgat cggtgagccg attgatgaga tgggcccagt taacgcgaaa gaaaaatggg aaattcaccg tccagctcct aaattcgaag accaagctgt taaagctgag atgttgatga ctggtattaa ggtcgttgat cttcttgcac cttacgcaaa gggtggcaag atcggtctct tcggtggtgc gggcgtaggt aaaacagttt tgattcaaga gttgattcgt aacatcgcta ctgagcacgg tggatactct gtattcgcag gtgtcggcga gcgtactcgc gaaggtaacg atctttgggt tgagatgaaa qaatcaggcg ttatcgcaaa gaccgcactt gtattcggtc agatgaat 408 <210> 2558 <211> 136 <212> PRT <213> Homo sapiens <400> 2558 Ile Thr Thr Pro Val Gly Glu Ala Val Leu Gly Arg Ile Leu Asn Val Ile Gly Glu Pro Ile Asp Glu Met Gly Pro Val Asn Ala Lys Glu Lys Trp Glu Ile His Arg Pro Ala Pro Lys Phe Glu Asp Gln Ala Val Lys

1825

Ala Glu Met Leu Met Thr Gly Ile Lys Val Val Asp Leu Leu Ala Pro

Tyr Ala Lys Gly Gly Lys Ile Gly Leu Phe Gly Gly Ala Gly Val Gly

```
75
                                                             80
65
                    70
Lys Thr Val Leu Ile Gln Glu Leu Ile Arg Asn Ile Ala Thr Glu His
Gly Gly Tyr Ser Val Phe Ala Gly Val Gly Glu Arg Thr Arg Glu Gly
                                105
Asn Asp Leu Trp Val Glu Met Lys Glu Ser Gly Val Ile Ala Lys Thr
                            120
Ala Leu Val Phe Gly Gln Met Asn
    130
                        135
<210> 2559
<211> 389
<212> DNA
<213> Homo sapiens
<400> 2559
tccttgaaga tgaacatctt tcggctgcaa actgaaaagg atttgaatcc tcagaaaaca
gettttetga aagategaet gaatgeaata caggaagage attetaagga eetgaagetg
ttgcatctcg aagttatgaa tttgcgccag caactgagag ctgtaaaaga ggaagaagac
aaggcacaag atgaggtgca aaggttgact gccactctga agattgcctc gcagacaaag
aagaatgcag ccattattga agaggaactg aagaccacaa aacgtaaaat gaaccttaaa
attcaagagc ttctagagat gacctcattt ccaagttggt tgaagaaaat aagaacctgc
aggatatett teaacaggaa catgaagaa
389
<210> 2560
<211> 129
<212> PRT
<213> Homo sapiens
<400> 2560
Ser Leu Lys Met Asn Ile Phe Arg Leu Gln Thr Glu Lys Asp Leu Asn
Pro Gln Lys Thr Ala Phe Leu Lys Asp Arg Leu Asn Ala Ile Gln Glu
Glu His Ser Lys Asp Leu Lys Leu Leu His Leu Glu Val Met Asn Leu
Arg Gln Gln Leu Arg Ala Val Lys Glu Glu Glu Asp Lys Ala Gln Asp
                        55
Glu Val Gln Arg Leu Thr Ala Thr Leu Lys Ile Ala Ser Gln Thr Lys
Lys Asn Ala Ala Ile Ile Glu Glu Glu Leu Lys Thr Thr Lys Arg Lys
Met Asn Leu Lys Ile Gln Glu Leu Leu Glu Met Thr Ser Phe Pro Ser
                                105
Trp Leu Lys Lys Ile Arg Thr Cys Arg Ile Ser Phe Asn Arg Asn Met
                                                 125
        115
                            120
Lys
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<210> 2561
<211> 429
<212> DNA
<213> Homo sapiens
<400> 2561
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atqtqqaqcc atttqaacaq qctcctcttc tggagcatat tttcttctgt cacttgtaga
aaagctgtat tggattgtga ggcaatgaaa acaaatgaat tcccttctcc atgtttggac
tcaaagacta aggtggttat gaagggtcaa aatgtatcta tgttttgttc ccataagaac
aaatcactgc agatcaccta ttcattgttt cgacgtaaga cacacctggg aacccaggat
ggaaaaggtg aacctgcgat ttttaaccta agcatcacag aagcccatga atcaggcccc
tacaaatgca aagcccaagt taccagctgt tcaaaataca gtcgtgactt cagcttcacg
420
attgtcgac
429
<210> 2562
<211> 143
<212> PRT
<213> Homo sapiens
<400> 2562
Xaa Leu Thr Thr Val Val Leu Leu Cys Leu Leu Thr Pro Ser Trp Thr
Ser Thr Gly Arg Met Trp Ser His Leu Asn Arg Leu Leu Phe Trp Ser
Ile Phe Ser Ser Val Thr Cys Arg Lys Ala Val Leu Asp Cys Glu Ala
Met Lys Thr Asn Glu Phe Pro Ser Pro Cys Leu Asp Ser Lys Thr Lys
Val Val Met Lys Gly Gln Asn Val Ser Met Phe Cys Ser His Lys Asn
                    70
                                        75
Lys Ser Leu Gln Ile Thr Tyr Ser Leu Phe Arg Arg Lys Thr His Leu
                                    90
Gly Thr Gln Asp Gly Lys Gly Glu Pro Ala Ile Phe Asn Leu Ser Ile
                                105
Thr Glu Ala His Glu Ser Gly Pro Tyr Lys Cys Lys Ala Gln Val Thr
                            120
Ser Cys Ser Lys Tyr Ser Arg Asp Phe Ser Phe Thr Ile Val Asp
    130
<210> 2563
<211> 267
<212> DNA
<213> Homo sapiens
```

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<400> 2563
ggatcccaqa cgagtgctgg cagcagtatg ggggccgtgg gggcgacggc caccgtcagc
accoeggica ceatecagaa catgacetee tettatgica ceateacate ceatgicett
aaqqccttta ccctttggga acaggcagag gccctcacaa ggaagaacaa agaattcttt
geteagetea geacaaaagt gegegtgttg geceteaaca geageetggt ggacetggtg
cactacacaa ggcagggcct ccagcgg
267
<210> 2564
<211> 89
<212> PRT
<213> Homo sapiens
<400> 2564
Gly Ser Gln Thr Ser Ala Gly Ser Ser Met Gly Ala Val Gly Ala Thr
Ala Thr Val Ser Thr Pro Val Thr Ile Gln Asn Met Thr Ser Ser Tyr
                                25
Val Thr Ile Thr Ser His Val Leu Lys Ala Phe Thr Leu Trp Glu Gln
                            40
Ala Glu Ala Leu Thr Arg Lys Asn Lys Glu Phe Phe Ala Gln Leu Ser
                        55
Thr Lys Val Arg Val Leu Ala Leu Asn Ser Ser Leu Val Asp Leu Val
His Tyr Thr Arg Gln Gly Leu Gln Arg
                85
<210> 2565
<211> 333
<212> DNA
<213> Homo sapiens
<400> 2565
cttcgcactg ctccgcgagt tcttggggga gtgagcacag cgcgtaagct cagccacgtg
tggttcgaat tcgattcctt ggtcaatgcc cgtgacgtgg gcggaatccc cacccccgat
gggccggtga aatcccagcg actgatccgc agcgacaacc tgcaggccct caccgaggcc
gacategece agttgcagea acteggtgte tecgatgtgg tegatetgeg ttecacetat
gaggtggcca gcgagggccc ggggccgctg accgggcgtg gggtgaccat ccaccccat
tecttectge eegaccagea egecaatgtg cae
333
<210> 2566
<211> 111
<212> PRT
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## <213> Homo sapiens

<210> 2567 <211> 396

<212> DNA

<213> Homo sapiens

## <400> 2567

ngaattcaaa ctggtgttcg tatgggccat aagcaaggta catatacgat gcgttttaga

agccagttca cagatcaacg totattcgga accgatcaat ttagtattgg tgggcgctat 120

tetgtaegag gttttagtgg agaagaaacc ttaagaggtg actegggeta ttatgtacaa

aatgaatggg cattaccatt tagaaaacaa caaattactc catatgtagg gatagatatt 240

ggacatgtat ggggggccatc tacagaaact caattaggta ataccttaat tggtggtgta 300

gttggtgtac gtggtatggt tggtgacgat gtaaactatg atgtatcact aggaacacca 360

attaagaaac cagaaggttt tgatacagat acgcgt 396

<210> 2568

<211> 132

<212> PRT

<213> Homo sapiens

## <400> 2568

Xaa Ile Gln Thr Gly Val Arg Met Gly His Lys Gln Gly Thr Tyr Thr

1 5 10 15

Met Arg Phe Arg Ser Gln Phe Thr Asp Gln Arg Leu Phe Gly Thr Asp 20 25 30

Gln Phe Ser Ile Gly Gly Arg Tyr Ser Val Arg Gly Phe Ser Gly Glu

Glu Thr Leu Arg Gly Asp Ser Gly Tyr Tyr Val Gln Asn Glu Trp Ala 50 55 60

Leu Pro Phe Arg Lys Gln Gln Ile Thr Pro Tyr Val Gly Ile Asp Ile

```
80
65
                    70
                                        75
Gly His Val Trp Gly Pro Ser Thr Glu Thr Gln Leu Gly Asn Thr Leu
                                    90
                85
Ile Gly Gly Val Val Gly Val Arg Gly Met Val Gly Asp Asp Val Asn
                                105
Tyr Asp Val Ser Leu Gly Thr Pro Ile Lys Lys Pro Glu Gly Phe Asp
                            120
Thr Asp Thr Arg
    130
<210> 2569
<211> 330
<212> DNA
<213> Homo sapiens
<400> 2569
cttgctgctg gtgctgatgt gtocatgatt ggccagttcg gcgtcggttt ctactctgcc
tacctcgtcg ccgatagagt tgtcgtgacc accaagcaca acgatgacga gcagtacgtg
tgggagtece aagegggegg gtegtteact gttactegtg acaegteagg ggageagett
ggcaggggca ctaagatcac actgttcctc aaggacgatc agctggagta ccttgaggag
cgtcgcctca aggatctggt caagaagcac tctgagttca tcagctaccc catctccctg
tggactgaaa agacaacaga gaaggaaatt
330
<210> 2570
<211> 110
<212> PRT
<213> Homo sapiens
<400> 2570
Leu Ala Ala Gly Ala Asp Val Ser Met Ile Gly Gln Phe Gly Val Gly
Phe Tyr Ser Ala Tyr Leu Val Ala Asp Arg Val Val Thr Thr Lys
His Asn Asp Asp Glu Gln Tyr Val Trp Glu Ser Gln Ala Gly Gly Ser
Phe Thr Val Thr Arg Asp Thr Ser Gly Glu Gln Leu Gly Arg Gly Thr
                        55
Lys Ile Thr Leu Phe Leu Lys Asp Asp Gln Leu Glu Tyr Leu Glu Glu
                    70
Arg Arg Leu Lys Asp Leu Val Lys Lys His Ser Glu Phe Ile Ser Tyr
Pro Ile Ser Leu Trp Thr Glu Lys Thr Thr Glu Lys Glu Ile
            100
                                105
<210> 2571
<211> 335
<212> DNA
<213> Homo sapiens
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<400> 2571
gaattcgcca atgttttctc cggtatgggc tccacagtaa cccttatcgg ccgctcccct
gtgctcctta aacatctcga taatgaacta tctgagctct ttactgagat cgctcgggag
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9	130	O <sub>1</sub>	014	0_0		135	014	014	O_u	,,op	140	p	ASP	пор	
Asp		Glu	Asp	Val	Glu		Glu	Glu	Glu	Glu		Glu	Glu	Glu	Glu
145	•		•		150	-				155					160
Glu	Glu	Glu	Glu	Glu	Glu	Glu	Asn	Glu	Asp	His	Gln	Met	Asn	Cys	His
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Asn	Thr	Arq	Ile	Met	Gln	Asp	Thr	Glu		Asp	Asp	Asn	Asn	Ser	Asp
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Glu	Tyr	Asp	Asn	Tyr	Asp	Glu	Leu	Val	Ala	Lys	Ser	Leu	Leu	Asn	Leu
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Glu	Asn	Leu	Gly	Arg	Lys	Ser	Glu	Leu	Ser	Leu	Asp	Leu	Asp	Ser	Asp
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Val	Val	Arg	Glu	Thr	Val	Asp	Ser	Leu	Lys	Leu	Leu	Ala	Gln	Gly	His
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Gly	Val		Leu	Ser	Glu	Asn		Asn	Asp	Arg	Asn	_	Ala	Asp	Ser
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Met		Gln	Gln	Asp	Ser	_	Asn	Met	Asn	Tyr		Met	Leu	Gly	Lys
_	290	_	_	_,	_	295	~-3	_			300	~ 3	_	_	
	Met	Asn	Asn	GIY		Met	GIu	Lys	Met		GIU	GIU	Ser	Asp	Glu
305	17.1	G	7	C	310	7	<b>~</b> 1	C	T	315	X a.m.	C1 -	C	Dho	320
GIU	vai	Cys	Leu	325	Ser	Leu	GIU	cys	330	Arg	ASII	GIII	Cys	335	ASP
Len	71 a	Ara	Lve		Ser	Glu	Thr	Λen		Gln	Glu	λνα	λen		Gln
ne a	ATA	Arg	340	нец	561	GIU	1111	345	FIO	GIII	GIU.	nr 9	350	110	GIII
Gln	Asn	Met	-	Ile	Arg	Gln	His		Ara	Pro	Glu	Glu		Phe	Pro
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Gly	Arq	Thr	Pro	Asp	Arg	Asn	Tyr	Ser	Asp	Met	Leu	Asn	Leu	Met	Arg
-	370			_	_	375	-		-		380				_
Leu	Glu	Glu	Gln	Leu	Ser	Pro	Arg	Ser	Arg	Val	Phe	Ala	Ser	Cys	Ala
385					390					395					400
Lys	Glu	Asp	Gly	Cys	His	Glu	Arg	Asp	Asp	Asp	Thr	Thr	Ser	Val	Asn
				405					410					415	
Ser	Asp	Arg	Ser	Glu	Glu	Val	Phe	Asp	Met	Thr	Lys	Gly	Asn	Leu	Thr
			420					425					430		
Leu	Leu		Lys	Ala	Ile	Ala		Glu	Thr	Glu	Arg		Lys	Ala	Met
		435		_			440	_			_	445		_	_
Arg		Lys	Met	Ala	Met		Ala	Gly	Arg	Arg	_	Asn	Met	Arg	Ser
_	450	_		_	_	455		_	_		460	_	_	_	_
-	GIU	Asp	GIn	ser	Pro	Arg	GIN	Leu	Pro	_	GIU	Asp	Arg	rys	
465	C	<b>.</b>	<b>3</b>	0	470	17-1	<b>. .</b>	<b>T</b>	D	475	<b></b>	~1	T	7	480
гÀг	ser	ser	Asp		His	vaı	гÀг	гÀг		Tyr	Tyr	GIY	ьуѕ	495	Pro
Co~	7 ~~	mb.~	~1	485	T	~1	C	T	490	Dro	Th.	Dro	Clv		λαπ
Ser	Arg	1111		гуѕ	Lys	GIU	ser	505	Cys	PIO	1111	210	510	Cys	Asp
G1 v	Th∽	Gl.	500 Hie	1/2 l	Thr	G1++	Lou		Dro	Hie	Hie	Δνα		اده.⊺	Ser
GIY	1117	515	min	val	1111	GTÅ	520	TÄT	-10	1113		525	JUL	u	Jer
Glv			Wic	Tvc	7 00	7 ~~		Pro	Dro	Glu	Tle		Δla	Met	His
	Cvs	Pro													
Gry	Cys 530	PIO	HIS	Lys	Asp	_	val	110	-10	014					
	530				Cys	535					540				

545					550					555					560
Val	Asn	Ser	Asn	Arg	Asn	Ser	His	Arg	Ser	Leu	Ser	Gly	Cys	Pro	Ile
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Ala	Ala	Ala	Glu	Lys	Leu	Ala	Lys	Ala	Gln	Glu	Lys	His	Gln	Ser	Cys
			580					585					590		
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-		595	-				600		_			605			
Cvs	Phe		Lys	Gln	Leu	Glu	Ile	Pro	Gln	Tyr	Gly	Tyr	Arg	Asn	Asn
-1-	610					615				-	620				
Val		Thr	Thr	Thr	Pro		Ser	Asn	Leu	Ala	Lys	Glu	Leu	Glu	Lys
625					630					635	•				640
	Ser	Lvs	Thr	Ser		Glu	Tvr	Asn	Ser	Tvr	Asp	Asn	His	Thr	Tyr
-1-	551	-1-		645			- 1 -	-	650	•	•			655	_
Glv	Laze	Ara	Ala	_	Δla	Pro	Lvs	Val		Thr	Ara	Asp	Ile	Ser	Pro
Cly	цys	~-9	660				-1-	665			5	1	670		
Lvc	Glv	ጥህም	Asp	Acn	"Ala	Lvs	Ara		Cvs	Lvs	Asp	Pro	Ser	Pro	Ser
цуз	Gry	675	nsp	7.5%		2,0	680	- / -	0,0	-1-		685			
car	Sar		Thr	Sar	Sar	ጥላታ		Pro	Ser	Ser	Ser		Asn	Leu	Ser
261	690	ser	1111	261	261	695	A+#	110	UCI	501	700				
C110		C1	Gly	50×	Cor		Sar	Sar	Thr	Cve		Lvs	Ser	Ser	Phe
705	Gry	GTÅ	Gry	261	710	ΑΙα	Jer	JCI	****	715		_,_			720
		mb~	His	7.00		C111	ת 1 ת	λ1 -	uie		Δla	Δla	Thr	Δla	
Asp	lyr	IIIL	nis		Met	Giu	міа	AIA	730	Nec	niu	AIU		735	
*	3	T	Ser	725	<b>3</b>	Ciro	7 ~~	C1.,		Dro	Gln	Δen	T.011		Thr
Leu	ASII	Leu		1111	Arg	Cys	Arg	745	Mec	FIO	GIII	ASII	750	501	
•	D	<b>a</b> 1-	740 Asp	7	C	7 l a	Th~	_	N cm	Dro	λen	Mot		Val	Δen
гуѕ	Pro		Asp	reu	Cys	Ala	760	ALG	MSII	FIU	АЗР	765	OIU	vai	nop
<i>α</i> 1	7	755	Thr	Τ ου	λαν	Lau	-	Mot	λcn	Larg	Gln		Pro	Ara	Δsp
GIU		GIY	1111	Leu	Asp	775	Ser	MEC	ASII	цуS	780	9	110	**** 5	
C	770	C	Pro	710	T 011		Dro	LOU	Glu	Dro		Ser	Pro	Gln	Gln
	Cys	cys	PIO	116	790	1111	PIO	пеа	Giu	795				<b></b>	800
785	×1 -	17-1	Met	7 an		7. ~~	Cvc	Dha	Gln		Glv	Glu	Glv	Asp	
GIII	Ald	Val	Mec		ASII	Arg	Cys	FIIC	810	пси	Q <sub>1</sub>	O_Lu	017	815	-1-
M	3	T	Pro	805	7 02	Т	The	Tvc		Lare	Dro	Δνσ	Δνα		Asn
Trp	Asp	Leu		val	Asp	ıyı	1111	825	Mec	шуз	FIO	nr 9	830		1.52
<b>a1</b>	3	<b>~1</b>	820 Ser	T	2	T10	The		C1,,	Λcn	Len	Δen		Dhe	Gln
GIU	ASP		ser	rys	Asp	116	840	PIO	GIU	Asp	שבע	845	110	1110	0111
<b>~</b> 3		835	Glu	<b>a</b> 1	N	T		Dwo	C1.	Clu	val		Tla	Dro	Sor
GIU		Leu	GIU	GIU	Arg		ıyı	PLO	GIY	Gru	860	1111	110	110	561
<b>5</b>	850	D	Lys	Ф	D	855	Cura	T	C1	Car		Lve	λen	T.011	Tla
	гĀ2	Pro	гàг	Tyr		GIII	Cys	рÃ2	GIU	875	пуз	Буз	vab	neu	880
865	<b>.</b>		<b>01.</b> -	<b>a</b>	870	T 0	77.	7.00	Luc	-	Tla	Δκα	Sar	Mot	
Thr	Leu	Ser	GIY		Pro	Leu	Ala	ASP	890	Ser	116	Arg	361	895	Leu
	<b>~</b> `	•		885	<b>01</b>	7	<b>T</b>	C		Ψh~	Dro	Clv	Cve		Gly
Ala	Thr	ser		GIn	GIU	Leu	гуѕ		PIO	1111	PLO	GIY	910	Asp	Gly
		•	900			_	_	905	<b>.</b>	***	N	C 0 ==		C	C1
Ser	GIY		ile	Thr	GIY	Asn		Ala	ser	HIS	Arg		Den	SEL	Gly
		915		_	_	_	920			-3-	. 1 -	925		T	<b>a</b> 1
Cys		Arg	Ala	Lys	Lys		GIY	IIe	Arg	TTE		GIII	ser	гуѕ	Glu
	930					935		_	_	_	940	D	<b>~</b> 1.	O	<b>N</b>
	Lys	Glu	Asp	Gln		Pro	Ile	Arg	Cys		val	Pro	GIĀ	cys	
945				=	950		_	_		955	•		C -	<b>7.1</b> -	960
Gly	Gln	Gly	His		Thr	Gly	Lys	Tyr		Ser	His	Arg	ser		Ser
				965	_	_			970	_		<b>~</b>	<b>.</b> .	975	~ 3
Gly	Cys	Pro	Leu	Ala	Ala	Lys	Arg	Gln	Lys	Asp	GIY	туr	ьeu	ASN	Gly

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980
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Ser Gln Phe Ser Trp Lys Ser Val Lys Thr Glu Gly Met Ser Cys Pro
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Thr Pro Gly Cys Asp Gly Ser Gly His Val Ser Gly Ser Phe Leu Thr
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                                            1020
His Arg Ser Leu Ser Gly Cys Pro Arg Ala Thr Ser Ala Met Lys Lys
                                        1035
                    1030
Ala Lys Leu Ser Gly Glu Gln Met Leu Thr Ile Lys Gln Arg Ala Ser
                                    1050
                1045
Asn Gly Ile Glu Asn Asp Glu Glu Ile Lys Gln Leu Asp Glu Glu Ile
                                1065
            1060
Lys Glu Leu Asn Glu Ser Asn Ser Gln Met Glu Ala Asp Met Ile Lys
        1075
                            1080
Leu Arg Thr Gln Ile Thr Thr Met Glu Ser Asn Leu Lys Thr Ile Glu
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                                            1100
Glu Glu Asn Lys Val Ile Glu Gln Gln Asn Glu Ser Leu Leu His Glu
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Leu Ala Asn Leu Ser Gln Ser Leu Ile His Ser Leu Ala Asn Ile Gln
                                    1130
                1125
Leu Pro His Met Asp Pro Ile Asn Glu Gln Asn Phe Asp Ala Tyr Val
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Thr Thr Leu Thr Glu Met Tyr Thr Asn Gln Asp Arg Tyr Gln Ser Pro
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Gln Val
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gtccgctcct ggccctgctc ttcttaactc cgttcaagcc ccctgggtca cacgtccatq
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542
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Leu Lys His His Ser Val Ser Pro Ser His Ala Phe Trp Ala Ser Ser
                            40
Pro Gln Arg Ala Lys Val Cys Glu His Phe Leu Ser Pro Leu Asn Gly
Leu Ser His Val Ile Leu Thr Arg Leu Cys Phe Ile Thr Ser Val
Ser Gly Ala Ser His Pro Arg Glu Glu Trp Trp Gly Cys Arg Leu Thr
                                    90
Leu Gly His Leu Ala Ala Ala Ser Val Leu Met Thr Thr Leu Leu Pro
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Gln Ala Leu Leu Leu Asn Val Leu Ala Leu
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                            120
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gatgccggct accegecgct ggtcaccecg tegteccaga tegtgggaac ecaggeggtg
ttcaacgtct tgatgggcaa tggttcgtac aagaatctca ctgccgagtt tgccgacctc
atgctcggct actacggcaa gcccattggc gagctcaatc ctgagatcgt cgagatggcc
aagaagcaga ccggcaagga gccgatcgac tgccgtcccg ccgacttgct cgagcctgag
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Lys Glu Val Pro Arg Val Arg Lys Asp Ala Gly Tyr Pro Pro Leu Val
Thr Pro Ser Ser Gln Ile Val Gly Thr Gln Ala Val Phe Asn Val Leu
                        55
                                             60
Met Gly Asn Gly Ser Tyr Lys Asn Leu Thr Ala Glu Phe Ala Asp Leu
Met Leu Gly Tyr Tyr Gly Lys Pro Ile Gly Glu Leu Asn Pro Glu Ile
                                    90
Val Glu Met Ala Lys Lys Gln Thr Gly Lys Glu Pro Ile Asp Cys Arg
                                105
Pro Ala Asp Leu Leu Glu Pro Glu Trp Asp Gln Leu Val Glu Gln Ala
                            120
Lys Ser Leu Glu Gly Phe Asp Gly Ser Asp Glu Asp Val Leu Thr Asn
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120
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acgategtet aegtegggge getgggeate gaegeeaage tggteetgee ggegaacgae
ctgcacggcg gcgccaagac gatcatcggc tgcgccaacg gattgggcgc agtgcgcacc
gactatgcca agatgatctc gctggtcgag accggacggc tggacctggg cgggatgatc
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acgcgt
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Gly Arg Gly Val Asp Phe Ala Ile Glu Val Val Gly Ile Val Glu Val
                            40
Met Glu Gln Ala Tyr Trp Ala Ala Arg Arg Gly Gly Thr Ile Val Tyr
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50
                        55
Val Gly Ala Leu Gly Ile Asp Ala Lys Leu Val Leu Pro Ala Asn Asp
                    70
                                        75
Leu His Gly Gly Ala Lys Thr Ile Ile Gly Cys Ala Asn Gly Leu Gly
                                    90
Ala Val Arg Thr Asp Tyr Ala Lys Met Ile Ser Leu Val Glu Thr Gly
Arg Leu Asp Leu Gly Gly Met Ile Thr Arg
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tectgeteca gggeaggeee tgggeaggge aatgetgggg acaeggtggg gagtaggeea
cagettetgt gggggagtte etatggeagg aggateatge ceageagegt ggaagageaa
ggggtgaccc tgcactcgag gctcctggga agacggggag ggttgaggtt acatgaggga
gaggggtcag ttggtgcatt cacagaacag cagggtggcc a
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Arg Thr Ala Pro Ser Cys Ser Arg Ala Gly Pro Gly Gln Gly Asn Ala
                            40
Gly Asp Thr Val Gly Ser Arg Pro Gln Leu Leu Trp Gly Ser Ser Tyr
Gly Arg Arg Ile Met Pro Ser Ser Val Glu Glu Gln Gly Val Thr Leu
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                                        75
His Ser Arg Leu Leu Gly Arg Arg Gly Gly Leu Arg Leu His Glu Gly
Glu Gly Ser Val Gly Ala Phe Thr Glu Gln Gln Gly Gly
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120
ttggcgcgcc aagcggatga agcgggggat tatatgactt atattgtgtc ttcggacctc
gatatgctgc aaatcgtaga tgaaaacacc aagatgtatc gaattctgcg gggattttcg
gatctcgagg agatggatac tccagcgatt gaagaaaaat atggaatctt gaagtcgcaa
tttttggacc tgaaggcgct gaagggggat aattcggata atattccagg cgtaccaggg
attggtgaga aaaccgcagt gaaactcttg aatgagtatg gtagcttgga ggggatttat
420
aatcatatca aggaaatttc gggggcgaca cagaagaaat tgattgctgg acgcgaatca
gctgagatgt ctcttaagct t
501
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                                    10
Glu Leu Ile Ser Ala Leu Ser Trp Gly Phe Met Glu Val Asp Glu Tyr
                                25
Glu Ala Asp Asp Ile Ile Gly Thr Leu Ala Arg Gln Ala Asp Glu Ala
Gly Asp Tyr Met Thr Tyr Ile Val Ser Ser Asp Leu Asp Met Leu Gln
Ile Val Asp Glu Asn Thr Lys Met Tyr Arg Ile Leu Arg Gly Phe Ser
                    70
Asp Leu Glu Glu Met Asp Thr Pro Ala Ile Glu Glu Lys Tyr Gly Ile
Leu Lys Ser Gln Phe Leu Asp Leu Lys Ala Leu Lys Gly Asp Asn Ser
                                105
Asp Asn Ile Pro Gly Val Pro Gly Ile Gly Glu Lys Thr Ala Val Lys
                            120
Leu Leu Asn Glu Tyr Gly Ser Leu Glu Gly Ile Tyr Asn His Ile Lys
                        135
Glu Ile Ser Gly Ala Thr Gln Lys Lys Leu Ile Ala Gly Arg Glu Ser
                    150
                                                             160
Ala Glu Met Ser Leu Lys Leu
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<210> 2595
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<213> Homo sapiens
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cacccccag ggatacctgt aatacctgct tcccacttca tgggctacaa tctcatgctg
gtcacaattt ctggggctca ctcatataac accaacaaat gggatatttg tgaagaactt
180
cgcctgcggg agcttgaaga agtcaaggcc agagctgctc agatggaaaa gaccatgcgg
tggtggtcgg actgcactgc caactggaga gaaaaatgga gtaaagttcg agctgaaagg
aacagtgccg gaaaggaagg aagacaactc agaataaaac tagagatggc gatgaaagaa
teggatecae tgaaacagaa acagagtttg ecaetteaga aggaggeatt agaagetaat
gttacccagg atctgaaget teetggette gtagaagaat eetgtgaaca tacagaccaa
480
tttcaattga gttcacaaat gcatgagtct atcagagagt atttggtaaa aagacaattt
tctacaaagg aggacacaaa taataaggaa caaggtgtgg ttattgattc tctaaaatta
agtgaggaga tgaagcccaa tctagatggt gttgatttat tcaacaatgg tggttctgga
aacggtgaaa cgaaaactgg gctgagactg aaagcaataa atctgccttt ggaaaatgaa
gtaactgaaa tttcagcttt gcaggtgcat ttggatgaat tccaaaaaat cttatggaag
gaaagagaaa tgcgcacagc tttggaaaaa gaaatagaga gactggagtc ggctttgtct
ctgtggaagt ggaagtatga agaactgaaa gaatcaaagc caaaaaatgt gaaagagttt
gacattette ttggtcaaca taatgatg
928
<210> 2596
<211> 309
<212> PRT
<213> Homo sapiens
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Arg Ser Ser Arg Cys Asn Asn Asp Gln Leu Arg His Ala Ala Thr Trp
Trp Pro Leu Pro His Pro Pro Gly Ile Pro Val Ile Pro Ala Ser His
                                25
Phe Met Gly Tyr Asn Leu Met Leu Val Thr Ile Ser Gly Ala His Ser
Tyr Asn Thr Asn Lys Trp Asp Ile Cys Glu Glu Leu Arg Leu Arg Glu
Leu Glu Glu Val Lys Ala Arg Ala Ala Gln Met Glu Lys Thr Met Arg
                                        75
Trp Trp Ser Asp Cys Thr Ala Asn Trp Arg Glu Lys Trp Ser Lys Val
Arg Ala Glu Arg Asn Ser Ala Gly Lys Glu Gly Arg Gln Leu Arg Ile
```

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100
                                 105
 Lys Leu Glu Met Ala Met Lys Glu Ser Asp Pro Leu Lys Gln Lys Gln
                             120
 Ser Leu Pro Leu Gln Lys Glu Ala Leu Glu Ala Asn Val Thr Gln Asp
                         135
 Leu Lys Leu Pro Gly Phe Val Glu Glu Ser Cys Glu His Thr Asp Gln
                     150
                                         155
 Phe Gln Leu Ser Ser Gln Met His Glu Ser Ile Arg Glu Tyr Leu Val
 Lys Arg Gln Phe Ser Thr Lys Glu Asp Thr Asn Asn Lys Glu Gln Gly
                                 185
. Val Val Ile Asp Ser Leu Lys Leu Ser Glu Glu Met Lys Pro Asn Leu
                             200
 Asp Gly Val Asp Leu Phe Asn Asn Gly Gly Ser Gly Asn Gly Glu Thr
                         215
 Lys Thr Gly Leu Arg Leu Lys Ala Ile Asn Leu Pro Leu Glu Asn Glu
 Val Thr Glu Ile Ser Ala Leu Gln Val His Leu Asp Glu Phe Gln Lys
 Ile Leu Trp Lys Glu Arg Glu Met Arg Thr Ala Leu Glu Lys Glu Ile
             260
                                 265
 Glu Arg Leu Glu Ser Ala Leu Ser Leu Trp Lys Trp Lys Tyr Glu Glu
                             280
 Leu Lys Glu Ser Lys Pro Lys Asn Val Lys Glu Phe Asp Ile Leu Leu
                         295
 Gly Gln His Asn Asp
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 ctgaaaaggc ctttgatgcc aggttaggaa atttacattt tatccacaaa atccaaatcc
 tcctttaata atgagatgtc tttacaagtt tttgggcaag agtggtatgg ctgacctggt
 gtcctgggaa ggaactgtgt ggggatggtg tgcaggactt acctagggtg ggaaaggcac
 aagcagcatg gggctgtggc agctaccaga ggtaaaggga catttcaggg aaagacttgg
 caggacaaga cottoottgg atggatggat gaataccaga aacagggacc caagagaaag
 gccgagtttc atagggagag aagatgggtc atgtatgagg catgttgagc ttgtactgat
ggtgagacgt ccagtcgaca gtactaccca ctggccagtg agaaatgtgg gaccagggtt
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tcactccacg agtgctattt cacttacgcg t
<210> 2598
<211> 108
<212> PRT
<213> Homo sapiens
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Met Gly Leu Trp Gln Leu Pro Glu Val Lys Gly His Phe Arg Glu Arg
Leu Gly Arg Thr Arg Pro Ser Leu Asp Gly Trp Met Asn Thr Arg Asn
                                25
Arg Asp Pro Arg Glu Arg Pro Ser Phe Ile Gly Arg Glu Asp Gly Ser
                            40
Cys Met Arg His Val Glu Leu Val Leu Met Val Arg Arg Pro Val Asp
Ser Thr Thr His Trp Pro Val Arg Asn Val Gly Pro Gly Phe Arg Arg
Lys Leu Gly Pro Glu Met Ser Ile Trp Lys Ala Pro Gly Trp Lys Arg
Val Val His Ser Thr Ser Ala Ile Ser Leu Thr Arg
            100
                                105
<210> 2599
<211> 356
<212> DNA
<213> Homo sapiens
<400> 2599
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tgtcattttg atatgaatat tatctccatg ttggaggaag ggaaagagcc ctggactgtg
aagagctgtg tgaaaatagc aagaaaacca agaacgcggg aatgtgtcaa aggcgtggtc
acagatatco otoctaaatq tacaatcaaq qatttqctac caaaagagaa gagcagtaca
gaagcagtat tccacacagt ggtgttggaa agacacgaaa gccctgacat tgaagacttt
tccttcaagg aaccccagaa aaatgtgcat gattttgagt gtcaatggag agatgn
<210> 2600
<211> 118
<212> PRT
<213> Homo sapiens
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Xaa Ile Leu Tyr Arg Asp Val Met Leu Glu Asn Tyr Trp Asn Leu Val
Ser Leu Gly Leu Cys His Phe Asp Met Asn Ile Ile Ser Met Leu Glu
Glu Gly Lys Glu Pro Trp Thr Val Lys Ser Cys Val Lys Ile Ala Arg
```

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35
                            40
                                                45
Lys Pro Arg Thr Arg Glu Cys Val Lys Gly Val Val Thr Asp Ile Pro
Pro Lys Cys Thr Ile Lys Asp Leu Leu Pro Lys Glu Lys Ser Ser Thr
                    70
                                        75
Glu Ala Val Phe His Thr Val Val Leu Glu Arg His Glu Ser Pro Asp
Ile Glu Asp Phe Ser Phe Lys Glu Pro Gln Lys Asn Val His Asp Phe
                                105
            100
Glu Cys Gln Trp Arg Asp
        115
<210> 2601
<211> 329
<212> DNA
<213> Homo sapiens
<400> 2601
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tacttgtaca aggcgcgttc cctggaagag cgccaagcga tgatcgccgg cggtggtggg
gtcaccgcct tcggcttgcg ccacaacccc aaggacactg cgcgcatgcg ccgcgaaggc
ttgatcgcct tgcccgaaga cctcggtatc cgccgcaccg acgccacccg cgaactgttg
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aagttcagga gctggtaaat gcgcgccct
<210> 2602
<211> 105
<212> PRT
<213> Homo sapiens
<400> 2602
Ala Pro Ile Met Ile Tyr Gly Asp Asp Val Thr His Leu Leu Thr Glu
Glu Gly Ile Ala Tyr Leu Tyr Lys Ala Arg Ser Leu Glu Glu Arg Gln
Ala Met Ile Ala Gly Gly Gly Val Thr Ala Phe Gly Leu Arg His
Asn Pro Lys Asp Thr Ala Arg Met Arg Arg Glu Gly Leu Ile Ala Leu
                        55
                                            60
Pro Glu Asp Leu Gly Ile Arg Arg Thr Asp Ala Thr Arg Glu Leu Leu
                                        75
Ala Ala Lys Ser Val Ala Asp Leu Val Glu Trp Ser Gly Gly Leu Cys
                85
Asn Pro Pro Ala Lys Phe Arg Ser Trp
                                105
            100
<210> 2603
<211> 423
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<212> DNA
<213> Homo sapiens
<400> 2603
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ggttgtggta agtggtcagg tgggccacga tctgggcact gatcacctcg gtgaaatcga
agetetggtt accetgageg gtegeegaea egaeaeggte caeaeeggag accagaeega
teteggagat gategegtaa cetteattgt egtagaggat ettgeaegea tegatgatge
gettgatete ettggeagtg aagatgattt ceateggggt gttggeegae agataetgae
cggagctggt ggtcacctgg gtggaatcca ggtcatccgg aaccgggttc aggttgtccg
420
cgg
423
<210> 2604
<211> 103
<212> PRT
<213> Homo sapiens
<400> 2604
Met Glu Ile Ile Phe Thr Ala Lys Glu Ile Lys Arg Ile Ile Asp Ala
Cys Lys Ile Leu Tyr Asp Asn Glu Gly Tyr Ala Ile Ile Ser Glu Ile
                                25
Gly Leu Val Ser Gly Val Asp Arg Val Val Ser Ala Thr Ala Gln Gly
Asn Gln Ser Phe Asp Phe Thr Glu Val Ile Ser Ala Gln Ile Val Ala
                        55
His Leu Thr Thr Tyr His Asn Leu Pro Ser Ala Asn Asn Gly Val Lys
                                        75
Glu Val Leu Asp Leu Gly Thr Thr Glu Pro Met Leu Leu Thr Thr Asp
                                    90
Leu Gly Val Gly Ala Gln Pro
            100
<210> 2605
<211> 354
<212> DNA
<213> Homo sapiens
<400> 2605
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aaacatatgt ggcaaacagc ggggggaggg gatctcacca acgtttttct ccacttcttc
tttgcatgct gggacctgtt ccactttcaa aatgtgtcat tttggaagga aagggaggaa
180
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caactacttg aaaggaatac acgtcagtat gagccctttc tcctcagcag aaggttgccc
caaagtacct cctctgaggc gagagaaagg agagaggagg agagacagct ttcatcaaat
ggggcaccca ggactctagg gagagaggca cgttctcaca aaggcccttt gagc
354
<210> 2606
<211> 101
<212> PRT
<213> Homo sapiens
<400> 2606
Met Ser Lys Ala Thr Val Ser Arg Gly Phe Asp Leu Asn Ile Phe Gln
Asn Ile Cys Gly Lys Gln Arg Gly Glu Gly Ile Ser Pro Thr Phe Phe
Ser Thr Ser Ser Leu His Ala Gly Thr Cys Ser Thr Phe Lys Met Cys
His Phe Gly Arg Lys Gly Arg Asn Asn Tyr Leu Lys Gly Ile His Val
Ser Met Ser Pro Phe Ser Ser Ala Glu Gly Cys Pro Lys Val Pro Pro
                                        75
                    70
Leu Arg Arg Glu Lys Gly Glu Arg Arg Arg Asp Ser Phe His Gln Met
                                    90
Gly His Pro Gly Leu
            100
<210> 2607
<211> 297
<212> DNA
<213> Homo sapiens
<400> 2607
tgatcaagaa caatgatacg atatcctaac caacagagga agcaacggaa gttgttgttg
tttttatgct gtttttttt tttgagaacg gatcttgccc ctgcccccag gccggaatgg
120
atgacatgga cagaaccccg tcggaaaaaa gccggaatgt gcaaacccaa attcccacca
cacgggggcc ctaacaattg gatccatccc cnaaaaaanc cntnncaaaa aaagntaaaa
acttttttt ttttaaannn anacccccaa aaaaaccaaa aaaaaaaatt taaaaaa
297
<210> 2608
<211> 95
<212> PRT
<213> Homo sapiens
<400> 2608
Met Ile Arg Tyr Pro Asn Gln Gln Arg Lys Gln Arg Lys Leu Leu Leu
                 5
                                    10
Phe Leu Cys Cys Phe Phe Phe Leu Arg Thr Asp Leu Ala Pro Ala Pro
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25
           20
Arg Pro Glu Trp Met Thr Trp Thr Glu Pro Arg Arg Lys Lys Ala Gly
                            40
Met Cys Lys Pro Lys Phe Pro Pro His Gly Gly Pro Asn Asn Trp Ile
                        55
His Pro Xaa Lys Xaa Pro Xaa Gln Lys Lys Xaa Lys Thr Phe Phe
Leu Xaa Xaa Xaa Pro Gln Lys Asn Gln Lys Lys Lys Phe Lys Lys
                                    90
<210> 2609
<211> 305
<212> DNA
<213> Homo sapiens
<400> 2609
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ttgacacgtc cctgacgatc cctatccgct catctggaga cccatgcgtt ccttggaccc
120
caattgccta cgaaaaaatt tttttttcc cccccaaaaa acacccccc ctcgcatctg
tgaaagttet accteggggt egteateteg getgteateg teggeaaate acteagetgg
ccgtaccctt cgtcatcgcc cgggccaccg acctcgacgg cncagcgtgc acggcaacga
300
ccacc
305
<210> 2610
<211> 98
<212> PRT
<213> Homo sapiens
<400> 2610
Met Met Ser Gly Lys Asp Pro Gly Met Ala Lys Val Tyr Gly Phe
Val Asp Thr Ser Leu Thr Ile Pro Ile Arg Ser Ser Gly Asp Pro Cys
Val Pro Trp Thr Pro Ile Ala Tyr Glu Lys Ile Phe Phe Pro Pro
Lys Lys His Pro Pro Leu Ala Ser Val Lys Val Leu Pro Arg Gly Arg
His Leu Gly Cys His Arg Arg Gln Ile Thr Gln Leu Ala Val Pro Phe
Val Ile Ala Arg Ala Thr Asp Leu Asp Gly Xaa Ala Cys Thr Ala Thr
                                    90
                85
Thr Thr
<210> 2611
<211> 342
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18

<212> DNA

<213> Homo sapiens

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<400> 2611
gccgccgcga tcgacggcga ctcctcgacc agctgggtgt ccagctcgct gcaaaccgct
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acgcccagcg ccaccgctgt cggagctcag gtgcgccgcg tcgaggtggc aacagccaac
ggeaccagea caattegett egaccagece ggeaageege tgaeggegge getgeectae
ggegagaeet catgggteeg gtteacegeg aceggeaceg acgaeggete ecceggegtg
300
cagtteggea teacegactt eteegtgacg cagtacgacg eg
<210> 2612
<211> 114
<212> PRT
<213> Homo sapiens
<400> 2612
Ala Ala Ala Ile Asp Gly Asp Ser Ser Thr Ser Trp Val Ser Ser Ser
Leu Gln Thr Ala Val Gly Gln Trp Leu Gln Val Asp Phe Asp His Pro
Val Thr Asn Ala Thr Ile Thr Leu Thr Pro Ser Ala Thr Ala Val Gly
Ala Gln Val Arg Arg Val Glu Val Ala Thr Ala Asn Gly Thr Ser Thr
Ile Arg Phe Asp Gln Pro Gly Lys Pro Leu Thr Ala Ala Leu Pro Tyr
Gly Glu Thr Ser Trp Val Arg Phe Thr Ala Thr Gly Thr Asp Asp Gly
Ser Pro Gly Val Gln Phe Gly Ile Thr Asp Phe Ser Val Thr Gln Tyr
            100
                                105
Asp Ala
<210> 2613
<211> 414
<212> DNA
<213> Homo sapiens
<400> 2613
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tatgccccta ctgggaaggg ccaagtgggc aggcagagtc tggggtggag cgaggtgggg
ctgggaagca ctcctgcttt tctgctgccc cagaacgaat gcaagttctg gcagcttctc
ctcctcctgg gaggaggaaa ggagggctcg cctccaggtc tcaggctgag ggagtgggct
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ggagaccete tagatggeca geagaggetg geetetgtga gaaggettee ttgegtgaet
ctggggcccc tcccaggctc tcctcgtggc aggcagggac ttgggccagc atgg
<210> 2614
<211> 107
<212> PRT
<213> Homo sapiens
<400> 2614
Met Val Leu Cys Leu Met Phe Ser Arg Tyr Ala Pro Thr Gly Lys Gly
Gln Val Gly Arg Gln Ser Leu Gly Trp Ser Glu Val Gly Leu Gly Ser
            20
                                25
Thr Pro Ala Phe Leu Leu Pro Gln Asn Glu Cys Lys Phe Trp Gln Leu
Leu Leu Leu Gly Gly Gly Lys Glu Gly Ser Pro Pro Gly Leu Arg
Leu Arg Glu Trp Ala Gly Asp Pro Leu Asp Gly Gln Gln Arg Leu Ala
                                        75
Ser Val Arg Arg Leu Pro Cys Val Thr Leu Gly Pro Leu Pro Gly Ser
Pro Arg Gly Arg Gln Gly Leu Gly Pro Ala Trp
           100
                                105
<210> 2615
<211> 394
<212> DNA
<213> Homo sapiens
<400> 2615
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aacaatgegg gegteaegea tgeggeegat tteetegaeg tgtgegaaga egatttegae
egggteatge geattaacet gaaategatg tteetgtgeg geeaggeege ggegegegag
atggtcaagc gcaacagcgg ctgcatcatc aacatgtcca gcgtgaatgc ggaactggcc
attecgaace aggtgeegta egtggtgteg aaaggegeea teaaceaget gaccaaggte
atggccttga acctggcgcc gcacggtgcg cgct
394
<210> 2616
<211> 131
<212> PRT
<213> Homo sapiens
<400> 2616
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Xaa Ala Ala Ala Leu Gly Arg Ser Ala Leu Leu Arg Xaa Asp Val

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10
                                                         15
Ser Gln Lys Ala Asp Val Asp Ala Met Leu Lys Glu Thr Leu Ala Gln
Phe Gly His Ile Asp Ile Leu Val Asn Asn Ala Gly Val Thr His Ala
                            40
                                                45
Ala Asp Phe Leu Asp Val Cys Glu Asp Asp Phe Asp Arg Val Met Arg
Ile Asn Leu Lys Ser Met Phe Leu Cys Gly Gln Ala Ala Ala Arg Glu
Met Val Lys Arg Asn Ser Gly Cys Ile Ile Asn Met Ser Ser Val Asn
Ala Glu Leu Ala Ile Pro Asn Gln Val Pro Tyr Val Val Ser Lys Gly
                                105
Ala Ile Asn Gln Leu Thr Lys Val Met Ala Leu Asn Leu Ala Pro His
                            120
Gly Ala Arg
   130
<210> 2617
<211> 513
<212> DNA
<213> Homo sapiens
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ataagggaca ccagcccga cagccatgtg gaacaagcaa tggagctggc cgatgtcacg
tgcttcgccg atcgacgcgt caccactctc tca
513
<210> 2618
<211> 171
<212> PRT
<213> Homo sapiens
<400> 2618
Xaa Arg Leu Ala Ser Cys Ser Gln His Trp Gly Phe Pro Ser Phe Phe
Ser Ser Ser Glu Arg His Cys Glu Met Gly Asn Ile Met Glu Thr Pro
Ile Leu Ser Gly Ser His Leu Asn Val Thr Leu Gly Asn His Lys Ile
```

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35
                            40
Leu Asn Asp Val Ser Val Ser Phe Gln Ala Gly Val Met His Ala Ile
Leu Gly Pro Asn Gly Ser Gly Lys Thr Thr Leu Val Arg Thr Leu Cys
                    70
                                        75
Gly Ala Leu Ser Pro Glu Ser Gly Ser Val Lys Phe Asp Gly Thr Asp
Leu Ser Thr Met Ser Ala Ser Cys Ile Ala Arg Arg Ile Ala Ile Val
                                105
Trp Gln Ser Ala Thr Ala Pro Ser Asp Leu Thr Val Arg His Leu Val
                            120
Gly Tyr Gly Arg Tyr Ala His Thr Pro Trp Trp Gln Ile Arg Asp Thr
                        135
Ser Ala Asp Ser His Val Glu Gln Ala Met Glu Leu Ala Asp Val Thr
                    150
                                        155
Cys Phe Ala Asp Arg Arg Val Thr Thr Leu Ser
<210> 2619
<211> 348
<212> DNA
<213> Homo sapiens
<400> 2619
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eggatgaacc egtacaacte ggtgtggage ggtgtgaceg aeggtgaegg geegeaggaa
120
cagcacgtca ttttccttga taacggtcgt accgacgtgc ttgccgacac ccttggtcgc
gaagtgttgc ggtgcatccg gtgtgcttcg tgtatcaata tctgcccggt ttacgagcgg
gegggeggtc accettacgg eteggtgtac ecegggeega ttggtgeggt getcaateeg
cagetgeggg gegtggagea tecegtegat egtggtetge cataegeg
<210> 2620
<211> 116
<212> PRT
<213> Homo sapiens
<400> 2620
Xaa Asn Phe Asp Asp Leu Glu Val Phe Leu Lys Leu Pro Arg Ser
                                    10
Ala Xaa Gly Glu Arg Met Asn Pro Tyr Asn Ser Val Trp Ser Gly Val
Thr Asp Gly Asp Gly Pro Gln Glu Gln His Val Ile Phe Leu Asp Asn
Gly Arg Thr Asp Val Leu Ala Asp Thr Leu Gly Arg Glu Val Leu Arg
Cys Ile Arg Cys Ala Ser Cys Ile Asn Ile Cys Pro Val Tyr Glu Arg
                    70
Ala Gly Gly His Pro Tyr Gly Ser Val Tyr Pro Gly Pro Ile Gly Ala
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Pro	Sar	Λen	λen	Lys	Δl =	Ser	Mot	T.011		Glu	Tur	Ser			Len
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Gln Ala Thr Phe Asn Leu Arg Lys His Leu Ile Gln His Gln Lys Thr

		255					260					265			
77.5 ~	N1 -	355	T	Th.	The	So	360	C1.0	C15	C1	Crea	365	t ve	T10	Phe
HIS	370	Ala	ьуѕ	IIII	1111	375	GIU	Cys	GIII	GIU	380	GIY	цуь	116	PHE
Ara		Sar	Ser	T.011	T.e.ii		Glu	Hie	Gln	Δla		Hic	Δla	Glv	Glu
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	Dro	Tur	Lvs	Cys		Glu	Ara	Glv	Lvs		Dhe	Ara	His	Asn	
GIU	210	- y -	цуз	405		مدت	•••	Q-7	410					415	501
Thr	Len	Lvs	Tle		Gln	Ara	Val	His		Glv	Glu	Lvs	Pro		Lys
1111	Leu	цуз	420	*****	Ų		•	425	001	011	014	2,0	430	-1-	<i>u,</i> 0
Cve	Ser	Glu		Glv	Lvs	Δla	Phe		Ara	His	Thr	His		Asn	Glu
Cys	561	435	Cys	017	Lyb		440					445			
His	Ara		Ile	His	Thr	Glv		Ara	Pro	His	Lvs		Gln	Glu	Cys
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	Thr	Ala	Glu	Lys		Tvr	Ser	Cvs	Ala		Cvs	Lvs	Glu	Thr	
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Ser	Asp	Asn	Asn	Arg	Leu	Val	Gln	His	Gln	Lys	Met	His	Thr	Val	Lys
	*		500	~				505		•			510		-
Thr	Pro	Tyr	Glu	Cys	Gln	Glu	Cys	Gly	Glu	Arg	Phe	Ile	Cys	Gly	Ser
		515		-			520	-				525			
Thr	Leu	Lys	Cys	His	Glu	Ser	Val	His	Ala	Arg	Glu	Lys	Gln	Gly	Phe
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Cys	Phe	Lys	Cys	Asn	Lys	Cys	Glu	Lys	Thr	Phe	Ser	Cys	Ser	Lys	Tyr
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Leu	Thr	Gln	Tyr	Glu	Arg	Ile	His	Thr	Arg	Gly	Val	Lys	Pro	Phe	Glu
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Cys	Asp	Gln	Cys	Gly	Lys	Ala	Phe	Gly	Gln	Ser	Thr		Leu	Ile	His
		595	_				600					605			
His		Arg	Ile	His	Ser		Val	Arg	Leu	Tyr		Trp	Gly	Glu	Gln
_	610	_				615	_	_		_	620		_	_,	•
_	Lys	Ala	Ile	Ser		Ala	Ser	Leu	He		Leu	GIn	ser	Pne	
625	_		•	_	630	_	_	_	<b>~1</b>	635	<b>~</b> 1	•	m)	D1	640
Thr	Lys	Glu	His	Pro	Pne	Lys	Cys	Asn		Cys	GIĀ	rys	Thr		Ser
***			•••	645	<b>G</b>	<b>7</b>	***	<b>01</b>	650	T1.	774.0	<b>7.1</b> -	C3	655	<b>1</b>
HIS	ser	Ата	660	Leu	ser	гур	HIS	665	reu	TIE	nis	ніа	670	Giu	Wall
Dro	Dho	Tura		eo-	Tuc	Cvc	λαη		t/al	Dha	Thr	Gln		Δen	Tyr
PIO	PHE	675	Cys	SEL	nys	Cys	680	Arg	vaı	FIIC	1111	685	arg	ASII	1 y L
T.011	Val		Hie	Glu	λνα	Thr		Δla	Δτσ	Lvs	T.VS		Len	Val	Cys
ne u	690	GIII	1113	GIU	Arg	695	1123	niu	9	_,,	700				0,0
Δen		Cvs	Glv	Lys	Thr		Ara	Gln	Ser	Ser		Leu	Ser	Lvs	His
705	Giu	Cys	Cry	шу <b>3</b>	710	riic	~~9	<b></b>		715	0,0			-1-	720
	Ara	Tle	His	Ser		Glu	Lvs	Pro	Tvr	_	Cvs	Asp	Tvr	Cvs	Gly
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Lvs	Ala	Phe	Glv	Leu	Ser	Ala	Glu	Leu		Ara	His	Gln	Arg	Ile	His
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Thr	Glv	Glu		Pro	Tvr	Val	Cvs	_	Glu	Cys	Glv	Lys		Phe	Thr
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Gln	Ser		Cys	Leu	Ser	Ile	-	Arg	Arg	Val	His	Thr	Gly	Glu	Lys
	770		-			775		_	_		780				
Pro	Tyr	Arg	Cys	Gly	Glu	Cys	Gly	Lys	Ala	Phe	Ala	Gln	Lys	Ala	Asn

795 785 790 Leu Thr Gln His Gln Arg Ile His Thr Gly Glu Lys Pro Tyr Ser Cys 805 810 Asn Val Cys Gly Lys Ala Phe Val Leu Ser Ala His Leu Asn Gln His 825 820 Leu Arg Val His Thr Gln Glu Thr Leu Tyr Gln Cys Gln Arg Cys Gln Lys Ala Phe Arg Cys His Ser Ser Leu Ser Arg His Gln Arg Val His 860 Asn Lys Gln Gln Tyr Cys Leu 870 <210> 2645 <211> 1018 <212> DNA <213> Homo sapiens <400> 2645 ctgaccacag agegetgete eegagaacee tgeaceette aatggagtaa attaccataa agectetice tracecatge trttggggtgt taacagetga ggetattegt eggtgacetg tgggactcga gctattcctg cagctcagca gacctcctgg ccgtggcaga cttctgcgtt atgaccegge tgetgggeta egtggacece etggatecea getttgtgge tgeegteate accatcacct tcaatccgct ctactggaat gtggttgcac gatgggaaca caagacccgc 300 aagetgagea gggeettegg atececetae etggeetget aetetetaag cateaceate ctgctcctga acttcctgcg ctcgcactgc ttcacgcagg ccatgctgag ccagcccagg atggagagee tggacacece egeggeetae ageetgggee tegegeteet gggaetggge gtcgtgctcg tgctctccag cttctttgca ctggggttcg ctggaacttt cctaggtgat tacttcggga tcctcaagga ggcgagagtg accgtgttcc ccttcaacat cctggacaac 600 acgggcctgc tectgacggt getggtggcc etcacetaca taatggetet ectatacgaa gagecettea eegetgagat etaeeggeag aaageeteeg ggteeeacaa gaggagetga ttgagetgea acagetttge tgaaggeetg gecageetee tggeetgeee caagtggeag gccctgcgca gggcgagaat ggtgcctgct gctcagggct cgcccccggc gtgggctgcc 900 ccaqtqcctt qgaacctqct qccttqqqga ccctggacgt gccgacatat ggccattgag ctccaaccca cacattccca ttcaccaata aaggcaccct gaccccaaaa aaaaaaaa 1018

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Pro Tyr Leu Ala Cys Tyr Ser Leu Ser Ile Thr Ile Leu Leu Leu Asn
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Phe Leu Arg Ser His Cys Phe Thr Gln Ala Met Leu Ser Gln Pro Arg
                    70
                                        75
Met Glu Ser Leu Asp Thr Pro Ala Ala Tyr Ser Leu Gly Leu Ala Leu
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Leu Gly Leu Gly Val Val Leu Val Leu Ser Ser Phe Phe Ala Leu Gly
                                105
            100
Phe Ala Gly Thr Phe Leu Gly Asp Tyr Phe Gly Ile Leu Lys Glu Ala
                            120
Arg Val Thr Val Phe Pro Phe Asn Ile Leu Asp Asn Pro Met Tyr Trp
                        135
Gly Ser Thr Ala Asn Tyr Leu Gly Trp Ala Ile Met His Ala Ser Pro
                    150
                                        155
Thr Gly Leu Leu Thr Val Leu Val Ala Leu Thr Tyr Ile Met Ala
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                165
Leu Leu Tyr Glu Glu Pro Phe Thr Ala Glu Ile Tyr Arg Gln Lys Ala
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Ser Gly Ser His Lys Arg Ser
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gcaactactg ctggaatcct tgcaacactt tctcattgta ttgaactaat ggttaaacgt
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gcatataaaa atgcaatgac agaacttaag aaaaaatccc actttggagg accagattat
gaagaaggcc ctaacagtct gattaatgaa gaagagttct ttgatgctgt tgaagctgct
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Lys Val Glu Glu Met Val Gln Asn His Met Thr Tyr Ser Leu Gln Asp
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Val Gly Gly Asp Ala Asn Trp Gln Leu Val Val Glu Glu Gly Glu Met
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Lys Val Tyr Arg Arg Glu Val Glu Glu Asn Gly Ile Val Leu Asp Pro
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Leu Lys Ala Thr His Ala Val Lys Gly Val Thr Gly His Glu Val Cys
                        215
Asn Tyr Phe Trp Asn Val Asp Val Arg Asn Asp Trp Glu Thr Thr Ile
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                                        235
Glu Asn Phe His Val Val Glu Thr Leu Ala Asp Asn Ala Ile Ile Ile
                                    250
                245
Tyr Gln Thr His Lys Arg Val Trp Pro Ala Ser Gln Arg Asp Val Leu
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Tyr Leu Ser Val Ile Arg Lys Ile Pro Ala Leu Thr Glu Asn Asp Pro
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Glu Thr Trp Ile Val Cys Asn Phe Ser Val Asp His Asp Ser Ala Pro
                        295
Leu Asn Asn Arg Cys Val Arg Ala Lys Ile Asn Val Ala Met Ile Cys
                                        315
                    310
Gln Thr Leu Val Ser Pro Pro Glu Gly Asn Gln Glu Ile Ser Arg Asp
                                    330
                325
Asn Ile Leu Cys Lys Ile Thr Tyr Val Ala Asn Val Asn Pro Gly Gly
                                345
Trp Ala Pro Ala Ser Val Leu Arg Ala Val Ala Lys Arg Glu Tyr Pro
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Lys Pro Ile Leu Phe
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gatgcctggg gcccatggag tgaatgctca cgcacctgcg ggggtggggc ctcctactct
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agtaatgtgg actgcccacc agaagcaggt gatttccgag ctcagcaatg ctcagctcat
aatgatgtca agcaccatgg ccagttttat gaatggcttc ctgtgtctaa tgaccctgac
aacccatgtt cactcaagtg ccaagccaaa ggaacaaccc tggttgttga actagcacct
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Cys Gln Ile Val Gly Cys Asp His Gln Leu Gly Ser Thr Val Lys Glu
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                                    170
Asp Asn Cys Gly Val Cys Asn Gly Asp Gly Ser Thr Cys Arg Leu Val
                                185
Arg Gly Gln Tyr Lys Ser Gln Leu Ser Ala Thr Lys Ser Asp Asp Thr
Val Val Ala Ile Pro Tyr Gly Ser Arg His Ile Arg Leu Val Leu Lys
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Gly Pro Asp His Leu Tyr Leu Glu Thr Lys Thr Leu Gln Gly Thr Lys
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Gly Glu Asn Ser Leu Ser Ser Thr Gly Thr Phe Leu Val Asp Asn Ser
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Ser Val Asp Phe Gln Lys Phe Pro Asp Lys Glu Ile Leu Arg Met Ala
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Gly Pro Leu Thr Ala Asp Phe Ile Val Lys Ile Arg Asn Ser Gly Ser
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Ala Asp Ser Thr Val Gln Phe Ile Phe Tyr Gln Pro Ile Ile His Arg
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Trp Arg Glu Thr Asp Phe Phe Pro Cys Ser Ala Thr Cys Gly Gly
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Tyr Gln Leu Thr Ser Ala Glu Cys Tyr Asp Leu Arg Ser Asn Arg Val
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Val Ala Asp Gln Tyr Cys His Tyr Tyr Pro Glu Asn Ile Lys Pro Lys
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Pro Lys Leu Gln Glu Cys Asn Leu Asp Pro Cys Pro Ala Ser Asp Gly
Tyr Lys Gln Ile Met Pro Tyr Asp Leu Tyr His Pro Leu Pro Arg Trp
                        375
                                            380
Glu Ala Thr Pro Trp Thr Ala Cys Ser Ser Ser Cys Gly Gly Ile
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Gln Ser Pro Gly Ser Phe Leu Cys Gly Gly Gly His Pro Gly Ala Cys
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<212> DNA

<213> Homo sapiens

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gagacaggcc gagtgaccaa gacaaaggac gggcatgagg ttcggacctg caaagtggcg

gacaaaacag gcagcatcaa tatctctgtc tgggacgatg ttggcaatct gatccagcct

ggggacatta tccggctcac caaagggtac gcttcagttt tcaaaggttg tctgacacta 300

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gtgcagaacg acagcaaccc ttcagcttcc cagcctacca ctggaccctc tgctgcctct
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Lys Asp Gly His Glu Val Arg Thr Cys Lys Val Ala Asp Lys Thr Gly
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Ser Ile Asn Ile Ser Val Trp Asp Asp Val Gly Asn Leu Ile Gln Pro
                                        75
                    70
Gly Asp Ile Ile Arg Leu Thr Lys Gly Tyr Ala Ser Val Phe Lys Gly
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Cys Leu Thr Leu Tyr Thr Gly Arg Gly Gly Asp Leu Gln Lys Ile Gly
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Glu Phe Cys Met Asp Tyr Ser Glu Val Pro Asn Phe Ser Glu Pro Asn
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Pro Glu Tyr Ser Thr Gln Gln Ala Pro Asn Lys Ala Val Gln Asn Asp
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Ser Asn Pro Ser Ala Ser Gln Pro Thr Thr Gly Pro Ser Ala Ala Ser
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                    150
Pro Ala Ser Glu Asn Gln Asn Gly Asn Gly Met Ser Ala Pro Pro Gly
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Phe Arg Val Val Ala His Ile Pro Leu Ile Leu Pro Pro Thr His Pro
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<213> Homo sapiens
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<400> 2653

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gcggaagaac 360	ccccctgacg	cgactggcgt	gtgcttctgc	ccgccaccgc	ccctcccgct
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cctttccaca 480	gccggcgctc	cgcgacccgc	ttggctcctg	agcccgtcgg	gtaggctctc
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PCT/US00/08621 **WO** 00/58473

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Pro Tyr Leu Ala Cys Tyr Ser Leu Ser Val Thr Ile Leu Leu Leu Asn
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~1			•	325	11-1	Db.a	T 0	C1		C 0 ~	- 1 ג	C1.,	t ou	Pro	C111
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<b>&gt;</b>	D	355	*	7	<b>T</b> 1.0	т1.		C2	Dho	λla	Sar		Dhe	Glu	Val
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Trp Val Val Asp Asn Phe Leu Met Arg Lys Gly Lys Thr Lys Ala Lys
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Leu Glu Glu Arg Gly Ala Asn Gln Asp Ser Arg Asn Gly Ser Lys Val

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Pro Gly Met Arg Glu Leu Ser His Leu Leu Pro Cys Val Ser Ala Pro
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180

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ctgaaactag 6420	tgaaaaggct	tcttcaagag	aaagtgaatc	agctcaaaga	acaagtgagc
	atctctgttc	acccacctca	cattccagct	ttaactccag	ttttacatcc
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.010. 0710					

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<211> 2096

<212> PRT

## <213> Homo sapiens

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				405					410					415	
Glu	Arg	Arg	Asn 420		Tyr	Asn	Leu	Arg 425		Leu	Asp	Glu	Glu 430		Lys
Glu	Arg	Ile 435	Ala	Ala	Leu	Lys	Asn 440	Glu	Leu	Arg	Lys	Glu 445	Arg	Glu	Gln
	450				_	455		_			Leu 460				
465					470					475	Asp				480
		_		485			•		490		Leu			495	
			500					505			Lys		510		
		515					520				Leu	525			·
	530					535					Gln 540				
545					550					555	Val				560
				565					570		Val			575	
			580					585			Asn		590		
		595		_		-	600		•		Asn	605			
	610	GIU	HIG	GIU	Leu	615	116	GIU	GIII	Mec	Lys 620	GIU	GIII	nis	птэ
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625					630					635	Asp				640
625 Tyr	Glu	Lys	Gln	Leu 645	630 Asp	Glu	Thr	Val	Val 650	635 Ser	Cys	Lys	Lys	Ala 655	640 Gln
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625 Tyr Glu Gln Ala	Glu Asn Ile Val 690	Lys Met Ser 675 Leu	Gln Lys 660 Asp	Leu 645 Gln Leu Glu	630 Asp Arg Lys Ala	Glu His Met His 695	Thr Glu Lys 680 His	Val Asn 665 Ile Glu	Val 650 Glu Ala Ala	635 Ser Thr Glu Thr	Cys His Leu Cys 700	Lys Thr Gln 685 Arg	Lys Leu 670 Gly His	Ala 655 Glu Gln Glu	640 Gln Glu Ala Glu
625 Tyr Glu Gln Ala Glu 705	Glu Asn Ile Val 690 Lys	Lys Met Ser 675 Leu Lys	Gln Lys 660 Asp Lys Gln	Leu 645 Gln Leu Glu Leu	630 Asp Arg Lys Ala Gln 710	Glu His Met His 695 Val	Thr Glu Lys 680 His	Val Asn 665 Ile Glu Leu	Val 650 Glu Ala Ala Glu	635 Ser Thr Glu Thr Glu 715	Cys His Leu Cys 700 Glu	Lys Thr Gln 685 Arg	Lys Leu 670 Gly His	Ala 655 Glu Gln Glu His	Glu Ala Glu Leu 720
Glu Gln Ala Glu 705 Gln	Glu Asn Ile Val 690 Lys Glu	Lys Met Ser 675 Leu Lys	Gln Lys 660 Asp Lys Gln Leu	Leu 645 Gln Leu Glu Leu Arg 725	Asp Arg Lys Ala Gln 710 Leu	Glu His Met His 695 Val Gln	Thr Glu Lys 680 His Lys	Val Asn 665 Ile Glu Leu Glu	Val 650 Glu Ala Ala Glu Met 730	635 Ser Thr Glu Thr Glu 715 Glu	Cys His Leu Cys 700 Glu Leu	Lys Thr Gln 685 Arg Lys	Lys Leu 670 Gly His Thr	Ala 655 Glu Gln Glu His Arg 735	Glu Ala Glu Leu 720 Leu
Glu Gln Ala Glu 705 Gln Thr	Glu Asn Ile Val 690 Lys Glu Gln	Lys Met Ser 675 Leu Lys Lys Ala	Gln Lys 660 Asp Lys Gln Leu Gln 740	Leu 645 Gln Leu Glu Leu Arg 725 Ala	Arg Lys Ala Gln 710 Leu Ser	Glu His Met His 695 Val Gln Phe	Thr Glu Lys 680 His Lys Gly	Val Asn 665 Ile Glu Leu Glu Arg 745	Val 650 Glu Ala Ala Glu Met 730 Glu	635 Ser Thr Glu Thr Glu 715 Glu Arg	Cys His Leu Cys 700 Glu Leu Glu	Lys Thr Gln 685 Arg Lys Lys Gly	Lys Leu 670 Gly His Thr Ala Leu 750	Ala 655 Glu Gln Glu His Arg 735 Gln	Glu Ala Glu Leu 720 Leu Ser
Glu Gln Ala Glu 705 Gln Thr	Glu Asn Ile Val 690 Lys Glu Gln Ala	Lys Met Ser 675 Leu Lys Lys Ala Trp 755	Gln Lys 660 Asp Lys Gln Leu Gln 740 Thr	Leu 645 Gln Leu Glu Leu Arg 725 Ala Glu	Asp Arg Lys Ala Gln 710 Leu Ser	Glu His Met His 695 Val Gln Phe Lys	Thr Glu Lys 680 His Lys Gly Val 760	Val Asn 665 Ile Glu Leu Glu Arg 745 Arg	Val 650 Glu Ala Ala Glu Met 730 Glu	635 Ser Thr Glu Thr Glu 715 Glu Arg Leu	Cys His Leu Cys 700 Glu Leu Glu Thr	Lys Thr Gln 685 Arg Lys Gly Gln 765	Lys Leu 670 Gly His Thr Ala Leu 750 Glu	Ala 655 Glu Gln Glu His Arg 735 Gln Leu	Glu Ala Glu Leu 720 Leu Ser Glu
Glu Gln Ala Glu 705 Gln Thr Ser	Glu Asn Ile Val 690 Lys Glu Gln Ala Phe 770	Lys Met Ser 675 Leu Lys Lys Ala Trp 755 His	Gln Lys 660 Asp Lys Gln Leu Gln 740 Thr	Leu 645 Gln Leu Glu Leu Arg 725 Ala Glu Glu	Arg Lys Ala Gln 710 Leu Ser Glu Gln	Glu His Met His 695 Val Gln Phe Lys Leu 775	Thr Glu Lys 680 His Lys Gly Val 760 Thr	Val Asn 665 Ile Glu Leu Glu Arg 745 Arg Ser	Val 650 Glu Ala Ala Glu Met 730 Glu Gly Leu	635 Ser Thr Glu 715 Glu Arg Leu Val	Cys His Leu Cys 700 Glu Leu Glu Thr	Lys Thr Gln 685 Arg Lys Lys Gly Gln 765 Lys	Lys Leu 670 Gly His Thr Ala Leu 750 Glu His	Ala 655 Glu Gln Glu His Arg 735 Gln Leu	Glu Ala Glu Leu 720 Leu Ser Glu Leu
Glu Gln Ala Glu 705 Gln Thr Ser Gln Glu 785	Glu Asn Ile Val 690 Lys Glu Gln Ala Phe 770 Lys	Lys Met Ser 675 Leu Lys Lys Ala Trp 755 His Glu	Gln Lys 660 Asp Lys Gln Leu Gln 740 Thr Gln Glu	Leu 645 Gln Leu Glu Leu Arg 725 Ala Glu Glu Leu	Arg Lys Ala Gln 710 Leu Ser Glu Gln Arg 790	Glu His Met His 695 Val Gln Phe Lys Leu 775 Lys	Thr Glu Lys 680 His Lys Gly Val 760 Thr	Val Asn 665 Ile Glu Leu Glu Arg 745 Arg Ser Leu	Val 650 Glu Ala Ala Glu Met 730 Glu Gly Leu Leu	Glu Thr Glu 715 Glu Arg Leu Val Glu 795	Cys His Leu Cys 700 Glu Leu Glu Thr Glu 780 Lys	Lys Thr Gln 685 Arg Lys Gly Gln 765 Lys His	Lys Leu 670 Gly His Thr Ala Leu 750 Glu His	Ala 655 Glu Gln Glu His Arg 735 Gln Leu Thr	Glu Ala Glu Leu 720 Leu Ser Glu Leu Glu 800
Glu Gln Ala Glu 705 Gln Thr Ser Gln Glu 785 Leu	Glu Asn Ile Val 690 Lys Glu Gln Ala Phe 770 Lys	Lys Met Ser 675 Leu Lys Lys Ala Trp 755 His Glu Glu	Gln Lys 660 Asp Lys Gln Leu Gln 740 Thr Gln Glu Gly	Leu 645 Gln Leu Glu Leu Arg 725 Ala Glu Leu Arg 805	Arg Lys Ala Gln 710 Leu Ser Glu Gln Arg 790 Glu	Glu His Met His 695 Val Gln Phe Lys Leu 775 Lys	Thr Glu Lys 680 His Lys His Gly Val 760 Thr Glu Met	Val Asn 665 Ile Glu Leu Glu Arg 745 Arg Ser Leu Glu	Val 650 Glu Ala Ala Glu Met 730 Glu Gly Leu Leu Thr 810	Glu Thr Glu 715 Glu Arg Leu Val Glu 795 Glu	Cys His Leu Cys 700 Glu Leu Glu Thr Glu 780 Lys Cys	Lys Thr Gln 685 Arg Lys Gly Gln 765 Lys His	Lys Leu 670 Gly His Thr Ala Leu 750 Glu His Gln Arg	Ala 655 Glu Gln Glu His Arg 735 Gln Leu Thr Arg 815	Glu Ala Glu Leu 720 Leu Ser Glu Leu Glu 800 Thr
Glu Gln Ala Glu 705 Gln Thr Ser Gln Glu 785 Leu Ser	Glu Asn Ile Val 690 Lys Glu Gln Ala Phe 770 Lys Gln Gln	Lys Met Ser 675 Leu Lys Lys Ala Trp 755 His Glu Glu Ile	Gln Lys 660 Asp Lys Gln Leu Gln 740 Thr Gln Glu Gly Glu 820	Leu 645 Gln Leu Glu Leu Arg 725 Ala Glu Glu Leu Arg 805 Ala	Arg Lys Ala Gln 710 Leu Ser Glu Gln Arg 790 Glu Gln	Glu His Met His 695 Val Gln Phe Lys Leu 775 Lys Lys	Thr Glu Lys 680 His Lys His Gly Val 760 Thr Glu Met Gln	Val Asn 665 Ile Glu Leu Glu Arg 745 Arg Ser Leu Glu Ser 825	Val 650 Glu Ala Ala Glu Met 730 Glu Gly Leu Leu Thr 810 Asp	635 Ser Thr Glu 715 Glu Arg Leu Val Glu 795 Glu Cys	Cys His Leu Cys 700 Glu Leu Glu Thr Glu 780 Lys Cys Gln	Lys Thr Gln 685 Arg Lys Gly Gln 765 Lys His Asn	Lys Leu 670 Gly His Thr Ala Leu 750 Glu His Gln Arg Val 830	Ala 655 Glu Gln Glu His Arg 735 Gln Leu Thr Arg 815 Thr	Glu Ala Glu Leu 720 Leu Ser Glu Leu Glu 800

		835					840					845			
Leu	Lys		Leu	Gln	Glu	Gln	-	Arg	Glu	Glu	Lys		Gln	Trp	Glu
	850	_				855					860				
Phe	Glu	Lys	Asp	Glu	Leu	Thr	Gln	Glu	Cys	Ala	Glu	Ala	Gln	Glu	Leu
870					875		_			880					
Leu	Lys	Glu	Thr		Lys	Arg	Glu	Lys		Thr	Ser	Leu	Val		Thr
				885	_		_		890	•	•	•••	•	895	
Gln	Glu	Arg		Met	Leu	Glu	Lys		Tyr	ьуs	Asp	HIS	леи 910	ASI	ser
24	17 <b>- 1</b>	17-1	900	7~~	Cln	Gln	T av	905	Gln	7 cn	Lau	Glu		T.Oll	λνα
Mec	Val	915	GIU	Arg	GIII	GIII	920	neu	GIII	vab	Leu	925	MOD	Dea	AL 9
Asn	Val		Glu	Thr	Gln	Gln		Leu	Leu	Ser	Asp		Ile	Leu	Glu
	930					935					940				
Leu	Lys	Ser	Ser	His	Lys	Arg	Glu	Leu	Arg	Glu	Arg	Glu	$\operatorname{Glu}$	Val	Leu
945					950					955					960
Cys	Gln	Gln	Gly	Val	Ser	Glu	Gln	Leu	Ala	Ser	Gln	Arg	Leu		Arg
			_	965		_			970				_	975	_
Leu	Glu	Met		His	Asp	Gln	Glu		Gln	Glu	Met	Met		Lys	Leu
•			980	3	<b>71</b> -	***	T	985	The se	Cura	<i>α</i> 1	Th.∽	990	Λαn	7 ~~
Leu	Ala	мет 995	GIU	Asn	TIE	His	1000		inr	Cys	GIU	1009		Asp	Arg
Glu	Δra		Glu	Met	Ser	Thr			Ser	Ara	Leu			Lvs	Ile
GIU	1010		GIU	1100	501	1015			001	••••	1020			-,-	
Lvs			Gln	Gln	Ala			Pro	Leu	Ser	Met	Leu	Gln	Ser	Gly
1029					1030					1035					1040
Cys	Gln	Val	Ile	Gly	Glu	Glu	Glu	Val	Glu	Gly	Asp	Gly	Ala	Leu	Ser
				1045	5				1050	)				1055	5
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Leu	Leu	Gln	_	_	Glu	Gln	Leu			Glu	Asn				Leu
			1060	<u> </u>				1069	5				1070	)	
		Leu	1060 Gln	<u> </u>		Gln His	Glu	1069 Gln	5			Glu	1070 Asn	)	
Leu	Ser	Leu 1075	1060 Gln	Arg	Ala	His	Glu 1080	1069 Gln	Ala	Val	Lys	Glu 108	1070 Asn	) Val	Lys
Leu	Ser Ala	Leu 1079 Thr	1060 Gln	Arg	Ala	His Arg	Glu 1080 Leu	1069 Gln	Ala	Val	Lys	Glu 1089 Gln	1070 Asn	) Val	Lys
Leu Met	Ser Ala	Leu 1079 Thr	1060 Gln 5 Glu	Arg Ile	Ala Ser	His Arg	Glu 1080 Leu	1069 Gln ) Gln	Ala Gln	Val Arg	Lys Leu 1100	Glu 1089 Gln	107( Asn 5 Lys	Val Leu	Lys Glu
Leu Met	Ser Ala 1090 Gly	Leu 1079 Thr	1060 Gln 5 Glu	Arg Ile	Ala Ser	His Arg 1099 Ser	Glu 1080 Leu	1069 Gln ) Gln	Ala Gln	Val Arg	Lys Leu 1100 Pro	Glu 1089 Gln	107( Asn 5 Lys	Val Leu	Lys
Leu Met Pro	Ser Ala 1090 Gly	Leu 1079 Thr ) Leu	1060 Gln Glu Val	Arg Ile Met	Ala Ser Ser	His Arg 1099 Ser	Glu 1080 Leu Cys	1069 Gln ) Gln Leu	Ala Gln Asp	Val Arg Glu 1115	Lys Leu 1100 Pro	Glu 1089 Gln ) Ala	1070 Asn Lys Thr	Val Leu Glu	Lys Glu Phe 1120
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Leu Met Pro 1109 Phe Thr	Ala 1090 Gly Gly Lys Asp	Leu 1079 Thr Leu Asn Gln Asp	Olu  Val  Thr  Val  1140  Glu	Arg Ile Met Ala 1129 Glu Val	Ser Ser 1110 Glu Gly Arg	Arg 1099 Ser Oln Val	Glu 1080 Leu Cys Thr Thr	Gln Gln Leu Glu Arg 1145 Gly	Ala Gln Asp Pro 1130 Arg Ser	Val Arg Glu 1115 Phe His	Lys Leu 1100 Pro Leu Val	Glu 1089 Gln Ala Gln Leu Thr	Lys Thr Gln Ser 1150 Ser	Val Leu Glu Asn 1135 Asp Ser	Lys Glu Phe 1120 Arg Leu Val
Leu Met Pro 1109 Phe Thr	Ser Ala 1090 Gly Gly Lys Asp	Leu 1079 Thr Leu Asn Gln Asp 1159	Olu  Val  Thr  Val  1140  Glu	Arg Ile Met Ala 1129 Glu Val	Ser Ser 1110 Glu Gly Arg	Arg 1099 Ser Gln Val Asp	Glu 1080 Leu Cys Thr Thr Leu 1160 Glu	Gln Gln Leu Glu Arg 1145 Gly	Ala Gln Asp Pro 1130 Arg Ser	Val Arg Glu 1115 Phe His	Lys Leu 1100 Pro Leu Val Gly	Glu 1089 Gln Ala Gln Leu Thr 1169 Ser	Lys Thr Gln Ser 1150 Ser	Val Leu Glu Asn 1135 Asp Ser	Lys Glu Phe 1120 Arg Leu Val
Leu Met Pro 1109 Phe Thr Glu	Ala 1090 Gly Gly Lys Asp Arg 1170	Leu 1075 Thr Leu Asn Gln Asp 1155 Gln	Thr Val 1140 Glu Glu Glu Glu Glu Glu	Arg Ile Met Ala 1129 Glu Val	Ser Ser 1110 Glu Gly Arg	Arg 1099 Ser Gln Val Asp	Glu 1080 Leu Cys Thr Thr Leu 1160 Glu	Gln Gln Gln Glu Glu Arg Gly Glu	Ala Gln Asp Pro 1130 Arg Ser Ser	Val Arg Glu 1115 Phe His Thr	Lys Leu 1100 Pro Leu Val Gly Ala 1180	Glu 1089 Gln Ala Gln Leu Thr 1169 Ser	1070 Asn Lys Thr Gln Ser 1150 Ser Val	Val Leu Glu Asn 1135 Asp Ser Glu	Lys Glu Phe 1120 Arg Leu Val
Leu Met Pro 1105 Phe Thr Glu Gln Phe	Ser Ala 1090 Gly Gly Lys Asp Arg 1170 Ser	Leu 1075 Thr Leu Asn Gln Asp 1155 Gln	Thr Val 1140 Glu Glu Glu Glu Glu Glu	Arg Ile Met Ala 1129 Glu Val	Ser Ser 1110 Glu Gly Arg Lys	Arg 1099 Ser Gln Val Asp Ile 1179 Ser	Glu 1080 Leu Cys Thr Thr Leu 1160 Glu	Gln Gln Gln Glu Glu Arg Gly Glu	Ala Gln Asp Pro 1130 Arg Ser Ser	Val Arg Glu 1115 Phe His Thr	Lys Leu 1100 Pro Leu Val Gly Ala 1180 Thr	Glu 1089 Gln Ala Gln Leu Thr 1169 Ser	1070 Asn Lys Thr Gln Ser 1150 Ser Val	Val Leu Glu Asn 1135 Asp Ser Glu	Lys Glu Phe 1120 Arg Leu Val
Leu Met Pro 1103 Phe Thr Glu Gln Phe 1183	Ala 1090 Gly Gly Lys Asp Arg 1170 Ser	Leu 1075 Thr Leu Asn Gln Asp 1155 Gln	Thr Val 1140 Glu Glu Leu	Arg Ile Met Ala 1129 Glu Val Val	Ala Ser Ser 1110 Glu Gly Arg Lys Asn 1190	Arg 1099 Ser Gln Val Asp Ile 1179 Ser	Glu 1080 Leu Cys Thr Thr Leu 1160 Glu	Gln  Gln  Gln  Leu  Glu  Arg  1149  Gly  Glu  Glu	Ala Gln Asp Pro 1130 Arg Ser Ser	Val Arg Glu 1115 Phe His Thr Glu Arg 1195	Lys Leu 1100 Pro Leu Val Gly Ala 1180 Thr	Glu 1089 Gln Ala Gln Leu Thr 1169 Ser	1070 Asn Lys Thr Gln Ser 1150 Ser Val	Val Leu Glu Asn 1135 Asp Ser Glu Trp	Lys Glu Phe 1120 Arg Leu Val Gly Glu 1200
Leu Met Pro 1103 Phe Thr Glu Gln Phe 1183	Ala 1090 Gly Gly Lys Asp Arg 1170 Ser	Leu 1075 Thr Leu Asn Gln Asp 1155 Gln	Thr Val 1140 Glu Glu Leu	Arg Ile Met Ala 1129 Glu Val Val	Ala Ser Ser 1110 Glu Gly Arg Lys Asn 1190 Ser	Arg 1099 Ser Gln Val Asp Ile 1179 Ser	Glu 1080 Leu Cys Thr Thr Leu 1160 Glu	Gln  Gln  Gln  Leu  Glu  Arg  1149  Gly  Glu  Glu	Ala Gln Asp Pro 1130 Arg Ser Ser	Val Arg Glu 1115 Phe His Thr Glu Arg 1195 Gln	Lys Leu 1100 Pro Leu Val Gly Ala 1180 Thr	Glu 1089 Gln Ala Gln Leu Thr 1169 Ser	1070 Asn Lys Thr Gln Ser 1150 Ser Val	Val Leu Glu Asn 1135 Asp Ser Glu Trp	Lys Glu Phe 1120 Arg Leu Val Gly Glu 1200 Cys
Leu Met Pro 1109 Phe Thr Glu Gln Phe 1189 Leu	Ser Ala 1090 Gly Gly Lys Asp Arg 1170 Ser Lys	Leu 1079 Thr Leu Asn Gln Asp 1159 Gln Glu Asn	Olu Val Thr Val 1140 Glu Glu Leu His	Arg Ile Met Ala 1125 Glu Val Val Glu Ile 1205	Ala Ser Ser 111( Glu Gly Arg Lys Asn 119( Ser	Arg 1099 Ser Gln Val Asp Ile 1179 Ser	Glu 1080 Leu Cys Thr Thr Leu 1160 Glu Glu Leu	Gln  Gln  Gln  Glu  Arg  Gly  Glu  Glu  Glu  Glu	Ala Gln Asp Pro 1130 Arg Ser Ser Thr Glu 1210	Val Arg Glu 1115 Phe His Thr Glu Arg 1195 Gln	Lys Leu 1100 Pro Leu Val Gly Ala 1180 Thr	Glu 1089 Gln Ala Gln Leu Thr 1169 Ser	1070 Asn Lys Thr Gln Ser 1150 Ser Val Ser Met	Val Leu Glu Asn 1135 Asp Ser Glu Trp Phe 1215	Lys Glu Phe 1120 Arg Leu Val Gly Glu 1200 Cys
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Leu Met Pro 1109 Phe Thr Glu Gln Phe 1189 Leu	Ser Ala 1090 Gly Gly Lys Asp Arg 1170 Ser Lys Asp	Leu 1075 Thr Leu Asn Gln Asp 1155 Gln Glu Asn Cys	Office of the second se	Arg Ile Met Ala 1129 Glu Val Val Glu Ile 1209 Leu	Ser Ser 1110 Glu Gly Arg Lys Asn 1190 Ser Ala	Arg 1099 Ser Gln Val Asp Ile 1179 Ser	Glu Leu Thr Leu 1160 Glu Glu Leu Glu Leu	Glu	Ala Gln Asp Pro 1130 Arg Ser Ser Thr Glu 1210 Lys	Val Arg Glu 1115 Phe His Thr Glu Arg 1195 Gln	Lys Leu 1100 Pro Leu Val Gly Ala 1180 Thr Leu Glu	Glu 1089 Gln Ala Gln Leu Thr 1169 Ser Glu Met Leu	1070 Asn Lys Thr Gln Ser 1150 Ser Val Ser Met Leu 1230 Ile	Val Leu Glu Asn 1135 Asp Ser Glu Trp Phe 1215 Phe	Lys Glu Phe 1120 Arg Leu Val Gly Glu 1200 Cys Asp
Leu Met Pro 1109 Phe Thr Glu Gln Phe 1189 Leu Ala Val	Ala 1090 Gly Gly Lys Asp Arg 1170 Ser Lys Asp	Leu 1075 Thr Leu Asn Gln Asp 1155 Gln Cys Val 1235	Office of the second se	Arg Ile Met Ala 1129 Glu Val Val Glu Ile 1209 Leu Lys	Ala Ser Ser 1110 Glu Gly Arg Lys Asn 1190 Ser Ala Lys	Arg 1099 Ser Gln Val Asp Ile 1179 Ser Leu Ser	Glu Leu Thr Leu 1160 Glu Glu Leu Leu Leu 1240	Glu	Ala Gln Asp Pro 1130 Arg Ser Ser Thr Glu 1210 Lys Ile	Val Arg Glu 1115 Phe His Thr Glu Arg 1199 Gln Gln Leu	Lys Leu 1100 Pro Leu Val Gly Ala 1180 Thr Leu Glu Glu	Glu 1089 Gln Ala Gln Leu Thr 1169 Ser Glu Met Leu Arg 1249	1070 Asn Lys Thr Gln Ser 1150 Ser Val Ser Met Leu 1230 Ile	Val Leu Glu Asn 1135 Asp Ser Glu Trp Phe 1215 Phe Pro	Lys Glu Phe 1120 Arg Leu Val Gly Glu 1200 Cys Asp Glu
Leu Met Pro 1109 Phe Thr Glu Gln Phe 1189 Leu Ala Val	Ser Ala 1090 Gly Gly Lys Asp Arg 1170 Ser Lys Asp Ser Ser	Leu 1075 Thr Leu Asn Gln Asp 1155 Gln Glu Asn Cys Val 1235 Pro	Office of the second se	Arg Ile Met Ala 1129 Glu Val Val Glu Ile 1209 Leu Lys	Ala Ser Ser 1110 Glu Gly Arg Lys Asn 1190 Ser Ala Lys	His Arg 1099 Ser Gln Val Asp Ile 1179 Ser Leu Ser Lys Leu	Glu Leu Thr Leu Glu Glu Leu Leu Leu Leu Leu	Glu	Ala Gln Asp Pro 1130 Arg Ser Ser Thr Glu 1210 Lys Ile	Val Arg Glu 1115 Phe His Thr Glu Arg 1199 Gln Gln Leu	Lys Leu 1100 Pro Leu Val Gly Ala 1180 Thr Leu Glu Glu Val	Glu 1089 Gln Ala Gln Leu Thr 1169 Ser Glu Met Leu Arg 1249 Ser	1070 Asn Lys Thr Gln Ser 1150 Ser Val Ser Met Leu 1230 Ile	Val Leu Glu Asn 1135 Asp Ser Glu Trp Phe 1215 Phe Pro	Lys Glu Phe 1120 Arg Leu Val Gly Glu 1200 Cys Asp Glu
Leu Met Pro 1103 Phe Thr Glu Gln Phe 1183 Leu Ala Val	Ser Ala 1090 Gly Gly Lys Asp Arg 1170 Ser Lys Asp Ser Ser 1250	Leu 1075 Thr Leu Asn Gln Asp 1155 Gln Cys Val 1235 Pro	Thr Val 1140 Glu Leu His Asp 1220 Leu Arg	Arg Ile Met Ala 1129 Glu Val Val Glu Ile 1209 Leu Lys	Ala Ser Ser 1110 Glu Gly Arg Lys Asn 1190 Ser Ala Lys	Arg 1099 Ser Gln Val Asp Ile 1179 Ser Leu Ser	Glu Leu Thr Leu Glu Glu Leu Leu Leu Leu Leu	Gln Gln Gln Glu Glu Glu Glu Glu Glu Glu Tys 1225 Lys	Ala Gln Asp Pro 1130 Arg Ser Ser Thr Glu 1210 Lys Ile Glu	Val Arg Glu 1115 Phe His Thr Glu Arg 1195 Gln Cln Leu Asp	Lys Leu 1100 Pro Leu Val Gly Ala 1180 Thr Clu Glu Val 1260	Glu 1089 Gln Ala Gln Leu Thr 1169 Ser Glu Met Leu Arg 1249 Ser	1070 Asn Lys Thr Gln Ser 1150 Ser Val Ser Met Leu 1230 Ile Arg	Val Leu Glu Asn 1135 Asp Ser Glu Trp Phe 1215 Phe	Lys Glu Phe 1120 Arg Leu Val Gly Glu 1200 Cys Asp Glu Asn

1265	1270	ı		1275		1280
Ala Leu Glu Asn	Asn Lys	Glu Leu	Thr Ala	Glu Val	Phe Arg	Leu Gln
	1285		129			1295
Asp Glu Leu Lys		Glu Glu		Glu Thr		
1300			1305		131	
Glu Lys Ser Tyr	Asp Glu	-		Asn Glu		Asn Val
1315	T 01-	1320		Tug Tou	1325	A~~ Ala
Leu Val Leu Arg 1330		GIY LYS	iie Giu	1340		AIG AIA
Trp Ser Ser Gly			Tur Glv		_	Glu Asn
1345	1350		191 019	1355	oca bea	1360
Leu Glu Ile Glu			Ile Leu		Asn Gln	Thr Leu
	1365	•	137			1375
Glu Glu Cys Val	Pro Arg	Val Arg	Ser Val	His His	Val Ile	Glu Glu
1380			1385		139	
Cys Lys Gln Glu	Asn Gln	_		Asn Thr		Leu Glu
1395		1400			1405	~1 ~1
Lys Val Lys Ala			Trp Leu			Gin Thr
1410		1415	Nam Clm	142		Clu Acr
His Gln Glu Arg	1430		ASN GIN	1435	rea Gra	1440
Thr Thr Leu Leu			Lvs His		His Gln	
	1445	om vab	145			1455
Ile Ala Glu Leu		Glu Lys			Glu Leu	Thr Arg
1460		-	1465		147	
Lys Leu Lys Glu	Arg Val	Pro Ile	Leu Val	Lys Gln	Lys Asp	Val Leu
1475		1480			1485	
Ser Pro Gly Lys	T. 1.00 Cl. 1	al., al.,	T T	7 7 Mar	Mot Wic	Acn Len
	-		red ras			Asp nea
1490	_	1495	_	150	0	
1490 Gln Ile Pro Cys	Ser Glu	1495 Met Gln	_	1500 Val Glu	0	Lys Tyr
1490 Gln Ile Pro Cys 1505	Ser Glu 1510	1495 Met Gln	Gln Lys	1500 Val Glu 1515	0 Leu Leu	Lys Tyr 1520
1490 Gln Ile Pro Cys 1505 Glu Ser Glu Lys	Ser Glu 1510 Leu Gln	1495 Met Gln	Gln Lys Asn Ser	1500 Val Glu 1515 Ile Leu	0 Leu Leu	Lys Tyr 1520 Glu Ile
1490 Gln Ile Pro Cys 1505 Glu Ser Glu Lys	Ser Glu 1510 Leu Gln 1525	1495 Met Gln Gln Glu	Gln Lys Asn Ser 153	1500 Val Glu 1515 Ile Leu 0	0 Leu Leu Arg Asn	Lys Tyr 1520 Glu Ile 1535
1490 Gln Ile Pro Cys 1505 Glu Ser Glu Lys	Ser Glu 1510 Leu Gln 1525 Glu Glu	1495 Met Gln Gln Glu	Gln Lys Asn Ser 153	1500 Val Glu 1515 Ile Leu 0	0 Leu Leu Arg Asn	Lys Tyr 1520 Glu Ile 1535 Gly Thr
1490 Gln Ile Pro Cys 1505 Glu Ser Glu Lys Thr Thr Leu Asn	Ser Glu 1510 Leu Gln 1525 Glu Glu	1495 Met Gln Gln Glu Asp Ser	Gln Lys Asn Ser 153 Ile Ser 1545	1500 Val Glu 1515 Ile Leu O Asn Leu	Leu Leu Arg Asn Lys Leu 155	Lys Tyr 1520 Glu Ile 1535 Gly Thr
1490 Gln Ile Pro Cys 1505 Glu Ser Glu Lys Thr Thr Leu Asn 1540	Ser Glu 1510 Leu Gln 1525 Glu Glu	1495 Met Gln Gln Glu Asp Ser	Gln Lys Asn Ser 153 Ile Ser 1545 Trp Gln	1500 Val Glu 1515 Ile Leu O Asn Leu	Leu Leu Arg Asn Lys Leu 155	Lys Tyr 1520 Glu Ile 1535 Gly Thr
1490 Gln Ile Pro Cys 1505 Glu Ser Glu Lys Thr Thr Leu Asn 1540 Leu Asn Gly Ser	Ser Glu 1510 Leu Gln 1525 Glu Glu Gln Glu Ala Val	1495 Met Gln Gln Glu Asp Ser Glu Met 1560 Leu Lys	Gln Lys Asn Ser 153 Ile Ser 1545 Trp Gln	Val Glu 1515 Ile Leu O Asn Leu Lys Thr	Leu Leu Arg Asn Lys Leu 155 Glu Ser 1565 Leu Lys	Lys Tyr 1520 Glu Ile 1535 Gly Thr O Val Lys
1490 Gln Ile Pro Cys 1505 Glu Ser Glu Lys Thr Thr Leu Asn 1540 Leu Asn Gly Ser 1555 Gln Glu Asn Ala 1570	Ser Glu 1510 Leu Gln 1525 Glu Glu Gln Glu Ala Val	1495 Met Gln Gln Glu Asp Ser Glu Met 1560 Leu Lys 1575	Gln Lys Asn Ser 153 Ile Ser 1545 Trp Gln Met Val	Val Glu 1515 Ile Leu O Asn Leu Lys Thr Glu Asn 158	Leu Leu Arg Asn Lys Leu 155 Glu Ser 1565 Leu Lys	Lys Tyr 1520 Glu Ile 1535 Gly Thr O Val Lys Lys Gln
1490 Gln Ile Pro Cys 1505 Glu Ser Glu Lys Thr Thr Leu Asn 1540 Leu Asn Gly Ser 1555 Gln Glu Asn Ala 1570 Ile Ser Glu Leu	Ser Glu 1510 Leu Gln 1525 Glu Glu Gln Glu Ala Val Lys Ile	1495 Met Gln Gln Glu Asp Ser Glu Met 1560 Leu Lys 1575 Lys Asn	Gln Lys Asn Ser 153 Ile Ser 1545 Trp Gln Met Val	Val Glu 1515 Ile Leu 0 Asn Leu Lys Thr Glu Asn 1586 Leu Asp	Leu Leu Arg Asn Lys Leu 155 Glu Ser 1565 Leu Lys	Lys Tyr 1520 Glu Ile 1535 Gly Thr O Val Lys Lys Gln Asn Thr
1490 Gln Ile Pro Cys 1505 Glu Ser Glu Lys Thr Thr Leu Asn 1540 Leu Asn Gly Ser 1555 Gln Glu Asn Ala 1570 Ile Ser Glu Leu 1585	Ser Glu 1510 Leu Gln 1525 Glu Glu Gln Glu Ala Val Lys Ile 1590	1495 Met Gln Gln Glu Asp Ser Glu Met 1560 Leu Lys 1575 Lys Asn	Gln Lys Asn Ser 153 Ile Ser 1545 Trp Gln Met Val Gln Gln	Val Glu 1515 Ile Leu 0 Asn Leu Lys Thr Glu Asn 1586 Leu Asp	Leu Leu Arg Asn Lys Leu 155 Glu Ser 1565 Leu Lys Leu Glu	Lys Tyr 1520 Glu Ile 1535 Gly Thr O Val Lys Lys Gln Asn Thr 1600
1490 Gln Ile Pro Cys 1505 Glu Ser Glu Lys Thr Thr Leu Asn 1540 Leu Asn Gly Ser 1555 Gln Glu Asn Ala 1570 Ile Ser Glu Leu 1585 Glu Leu Ser Gln	Ser Glu 1510 Leu Gln 1525 Glu Glu Gln Glu Ala Val Lys Ile 1590 Lys Asn	1495 Met Gln Gln Glu Asp Ser Glu Met 1560 Leu Lys 1575 Lys Asn	Gln Lys Asn Ser 153 Ile Ser 1545 Trp Gln Met Val Gln Gln Asn Gln	Val Glu 1515 Ile Leu 0 Asn Leu Lys Thr Glu Asn 1586 Leu Asp 1595 Glu Lys	Leu Leu Arg Asn Lys Leu 155 Glu Ser 1565 Leu Lys Leu Glu	Lys Tyr 1520 Glu Ile 1535 Gly Thr O Val Lys Lys Gln Asn Thr 1600 Glu Leu
1490 Gln Ile Pro Cys 1505 Glu Ser Glu Lys Thr Thr Leu Asn 1540 Leu Asn Gly Ser 1555 Gln Glu Asn Ala 1570 Ile Ser Glu Leu 1585 Glu Leu Ser Gln	Ser Glu 1510 Leu Gln 1525 Glu Glu Gln Glu Ala Val Lys Ile 1590 Lys Asn 1605	Met Gln Gln Glu Asp Ser Glu Met 1560 Leu Lys 1575 Lys Asn Ser Pro	Gln Lys Asn Ser 153 Ile Ser 1545 Trp Gln Met Val Gln Gln Asn Gln 161	Val Glu 1515 Ile Leu 0 Asn Leu Lys Thr Glu Asn 1586 Leu Asp 1595 Glu Lys 0	Leu Leu Arg Asn Lys Leu 155 Glu Ser 1565 Leu Lys Leu Glu Leu Gln	Lys Tyr 1520 Glu Ile 1535 Gly Thr O Val Lys Lys Gln Asn Thr 1600 Glu Leu 1615
1490 Gln Ile Pro Cys 1505 Glu Ser Glu Lys Thr Thr Leu Asn 1540 Leu Asn Gly Ser 1555 Gln Glu Asn Ala 1570 Ile Ser Glu Leu 1585 Glu Leu Ser Gln Asn Gln Leu Leu	Ser Glu 1510 Leu Gln 1525 Glu Glu Gln Glu Ala Val Lys Ile 1590 Lys Asn 1605 Thr Glu	Met Gln Gln Glu Asp Ser Glu Met 1560 Leu Lys 1575 Lys Asn Ser Pro	Gln Lys Asn Ser 153 Ile Ser 1545 Trp Gln Met Val Gln Gln Asn Gln 161 Cys Gln	Val Glu 1515 Ile Leu 0 Asn Leu Lys Thr Glu Asn 1586 Leu Asp 1595 Glu Lys 0	Leu Leu Arg Asn Lys Leu 155 Glu Ser 1565 Leu Lys Leu Glu Leu Gln Lys Glu	Lys Tyr 1520 Glu Ile 1535 Gly Thr Val Lys Lys Gln Asn Thr 1600 Glu Leu 1615 Pro Gly
1490 Gln Ile Pro Cys 1505 Glu Ser Glu Lys Thr Thr Leu Asn 1540 Leu Asn Gly Ser 1555 Gln Glu Asn Ala 1570 Ile Ser Glu Leu 1585 Glu Leu Ser Gln Asn Gln Leu Leu 1620	Ser Glu 1510 Leu Gln 1525 Glu Glu Gln Glu Ala Val Lys Ile 1590 Lys Asn 1605 Thr Glu	1495 Met Gln Gln Glu Asp Ser Glu Met 1566 Leu Lys 1575 Lys Asn Ser Pro Met Leu	Gln Lys Asn Ser 153 Ile Ser 1545 Trp Gln Met Val Gln Gln Asn Gln 161 Cys Gln 1625	Val Glu 1515 Ile Leu 0 Asn Leu Lys Thr Glu Asn 158 Leu Asp 1595 Glu Lys 0 Lys Glu	Leu Leu  Arg Asn  Lys Leu 155 Glu Ser 1565 Leu Lys Leu Glu  Leu Gln  Lys Glu 163	Lys Tyr 1520 Glu Ile 1535 Gly Thr Val Lys Lys Gln Asn Thr 1600 Glu Leu 1615 Pro Gly
1490 Gln Ile Pro Cys 1505 Glu Ser Glu Lys Thr Thr Leu Asn 1540 Leu Asn Gly Ser 1555 Gln Glu Asn Ala 1570 Ile Ser Glu Leu 1585 Glu Leu Ser Gln Asn Gln Leu Leu	Ser Glu 1510 Leu Gln 1525 Glu Glu Gln Glu Ala Val Lys Ile 1590 Lys Asn 1605 Thr Glu	1495 Met Gln Gln Glu Asp Ser Glu Met 1566 Leu Lys 1575 Lys Asn Ser Pro Met Leu	Gln Lys Asn Ser 153 Ile Ser 1545 Trp Gln Met Val Gln Gln Asn Gln 161 Cys Gln 1625 Gln Glu	Val Glu 1515 Ile Leu 0 Asn Leu Lys Thr Glu Asn 158 Leu Asp 1595 Glu Lys 0 Lys Glu	Leu Leu  Arg Asn  Lys Leu 155 Glu Ser 1565 Leu Lys Leu Glu  Leu Gln  Lys Glu 163	Lys Tyr 1520 Glu Ile 1535 Gly Thr Val Lys Lys Gln Asn Thr 1600 Glu Leu 1615 Pro Gly
1490 Gln Ile Pro Cys 1505 Glu Ser Glu Lys Thr Thr Leu Asn 1540 Leu Asn Gly Ser 1555 Gln Glu Asn Ala 1570 Ile Ser Glu Leu 1585 Glu Leu Ser Gln Asn Gln Leu Leu 1620 Asn Ser Ala Leu 1635	Ser Glu 1510 Leu Gln 1525 Glu Glu Gln Glu Ala Val Lys Ile 1590 Lys Asn 1605 Thr Glu Glu Glu	1495 Met Gln Gln Glu Asp Ser Glu Met 1560 Leu Lys 1575 Lys Asn Ser Pro Met Leu Arg Glu 1640	Gln Lys Asn Ser 153 Ile Ser 1545 Trp Gln Met Val Gln Gln Gln Cys Gln 1625 Gln Glu	Val Glu 1515 Ile Leu 0 Asn Leu Lys Thr Glu Asn 1580 Leu Asp 1595 Glu Lys 0 Lys Glu Lys Phe	Leu Leu Lys Leu 155 Glu Ser 1565 Leu Lys Leu Glu Leu Glu Lys Glu Asn Leu 1645	Lys Tyr 1520 Glu Ile 1535 Gly Thr Val Lys Lys Gln Asn Thr 1600 Glu Leu 1615 Pro Gly Uys Glu
1490 Gln Ile Pro Cys 1505 Glu Ser Glu Lys Thr Thr Leu Asn 1540 Leu Asn Gly Ser 1555 Gln Glu Asn Ala 1570 Ile Ser Glu Leu 1585 Glu Leu Ser Gln Asn Gln Leu Leu 1620 Asn Ser Ala Leu	Ser Glu 1510 Leu Gln 1525 Glu Glu Gln Glu Ala Val Lys Ile 1590 Lys Asn 1605 Thr Glu Glu Glu Glu Glu Cys Lys	1495 Met Gln Gln Glu Asp Ser Glu Met 1560 Leu Lys 1575 Lys Asn Ser Pro Met Leu Arg Glu 1640	Gln Lys Asn Ser 153 Ile Ser 1545 Trp Gln Met Val Gln Gln Gln Cys Gln 1625 Gln Glu	Val Glu 1515 Ile Leu 0 Asn Leu Lys Thr Glu Asn 1580 Leu Asp 1595 Glu Lys 0 Lys Glu Lys Phe	Leu Leu Lys Leu Lys Leu Lys Glu Ser 1565 Leu Lys Leu Glu Leu Glu Leu Glu Leu Glu Lou Glu	Lys Tyr 1520 Glu Ile 1535 Gly Thr Val Lys Lys Gln Asn Thr 1600 Glu Leu 1615 Pro Gly Uys Glu
1490 Gln Ile Pro Cys 1505 Glu Ser Glu Lys  Thr Thr Leu Asn 1540 Leu Asn Gly Ser 1555 Gln Glu Asn Ala 1570 Ile Ser Glu Leu 1585 Glu Leu Ser Gln  Asn Gln Leu Leu 1620 Asn Ser Ala Leu 1635 Glu Pro Glu Arg	Ser Glu 1510 Leu Gln 1525 Glu Glu Gln Glu Ala Val Lys Ile 1590 Lys Asn 1605 Thr Glu Glu Glu Cys Lys	1495 Met Gln Gln Glu Asp Ser Glu Met 1560 Leu Lys 1575 Lys Asn Ser Pro Met Leu Arg Glu 1640 Val Gln 1655	Gln Lys Asn Ser 153 Ile Ser 1545 Trp Gln Met Val Gln Gln Asn Gln 161 Cys Gln 1625 Gln Glu Ser Ser	Val Glu 1515 Ile Leu 0 Asn Leu Lys Thr Glu Asn 1586 Leu Asp 1595 Glu Lys 0 Lys Glu Lys Phe Thr Leu 1666	Leu Leu Lys Leu Lys Leu Lys Glu Ser 1565 Leu Lys Leu Glu Leu Glu Leu Glu Lou G	Lys Tyr 1520 Glu Ile 1535 Gly Thr Val Lys Lys Gln Asn Thr 1600 Glu Leu 1615 Pro Gly Lys Glu Ser Leu
1490 Gln Ile Pro Cys 1505 Glu Ser Glu Lys  Thr Thr Leu Asn 1540 Leu Asn Gly Ser 1555 Gln Glu Asn Ala 1570 Ile Ser Glu Leu 1585 Glu Leu Ser Gln  Asn Gln Leu Leu 1620 Asn Ser Ala Leu 1635 Glu Pro Glu Arg 1650 Glu Ala Glu Leu 1665	Ser Glu 1510 Leu Gln 1525 Glu Glu Gln Glu Ala Val Lys Ile 1590 Lys Asn 1605 Thr Glu Glu Glu Cys Lys Ser Glu 1670	1495 Met Gln Gln Glu Asp Ser Glu Met 1560 Leu Lys 1575 Lys Asn Ser Pro Met Leu Arg Glu 1640 Val Gln 1655 Val Lys	Gln Lys Asn Ser 153 Ile Ser 1545 Trp Gln Met Val Gln Gln Asn Gln 161 Cys Gln 1625 Gln Glu Ser Ser	Val Glu 1515 Ile Leu 0 Asn Leu Lys Thr Glu Asn 1586 Leu Asp 1595 Glu Lys 0 Lys Glu Lys Phe Thr Leu 1666 Thr His	Leu Leu  Arg Asn  Lys Leu  155  Glu Ser  1565  Leu Lys  Leu Glu  Leu Glu  Leu Glu  Lou Lou Glu  Lou Gl	Lys Tyr 1520 Glu Ile 1535 Gly Thr Val Lys Lys Gln Asn Thr 1600 Glu Leu 1615 Pro Gly Lys Glu Ser Leu Gln Gln 1680
1490 Gln Ile Pro Cys 1505 Glu Ser Glu Lys  Thr Thr Leu Asn 1540 Leu Asn Gly Ser 1555 Gln Glu Asn Ala 1570 Ile Ser Glu Leu 1585 Glu Leu Ser Gln  Asn Gln Leu Leu 1620 Asn Ser Ala Leu 1635 Glu Pro Glu Arg 1650 Glu Ala Glu Leu 1665 Glu Asn Pro Leu	Ser Glu 1510 Leu Gln 1525 Glu Glu Gln Glu Ala Val Lys Ile 1590 Lys Asn 1605 Thr Glu Glu Glu Cys Lys Ser Glu 1670 Leu Gln	1495 Met Gln Gln Glu Asp Ser Glu Met 1560 Leu Lys 1575 Lys Asn Ser Pro Met Leu Arg Glu 1640 Val Gln 1655 Val Lys	Gln Lys Asn Ser 153 Ile Ser 1545 Trp Gln Met Val Gln Gln Asn Gln 161 Cys Gln 1625 Gln Glu Ser Ser Ile Gln Leu Glu	Val Glu 1515 Ile Leu 0 Asn Leu Lys Thr Glu Asn 158 Leu Asp 1595 Glu Lys 0 Lys Glu Lys Phe Thr Leu 1666 Thr His 1675 Lys Met	Leu Leu  Arg Asn  Lys Leu  155  Glu Ser  1565  Leu Lys  Leu Glu  Leu Glu  Leu Glu  Lou Lou Glu  Lou Gl	Lys Tyr 1520 Glu Ile 1535 Gly Thr  Val Lys Lys Gln Asn Thr 1600 Glu Leu 1615 Pro Gly  Lys Glu Ser Leu Gln Gln 1680 Leu His
1490 Gln Ile Pro Cys 1505 Glu Ser Glu Lys  Thr Thr Leu Asn 1540 Leu Asn Gly Ser 1555 Gln Glu Asn Ala 1570 Ile Ser Glu Leu 1585 Glu Leu Ser Gln  Asn Gln Leu Leu 1620 Asn Ser Ala Leu 1635 Glu Pro Glu Arg 1650 Glu Ala Glu Leu 1665 Glu Asn Pro Leu	Ser Glu 1510 Leu Gln 1525 Glu Glu Gln Glu Ala Val Lys Ile 1590 Lys Asn 1605 Thr Glu Glu Glu Cys Lys Ser Glu 1670 Leu Gln 1685	1495 Met Gln Gln Glu Asp Ser Glu Met 1560 Leu Lys 1575 Lys Asn Ser Pro Met Leu Arg Glu 1640 Val Gln 1655 Val Lys Asp Glu	Gln Lys Asn Ser 153 Ile Ser 1545 Trp Gln Met Val Gln Gln Asn Gln 161 Cys Gln 1625 Gln Glu Ser Ser Ile Gln Leu Glu 169	Val Glu 1515 Ile Leu 0 Asn Leu Lys Thr Glu Asn 158 Leu Asp 1595 Glu Lys 0 Lys Glu Lys Phe Thr Leu 1666 Thr His 1675 Lys Met 0	Leu Leu Lys Leu Lys Leu Lys Clu Ser 1565 Leu Lys Leu Glu Leu Glu Leu Glu Leu Glu Loys Glu 1636 Asn Leu 1645 Val Ser Ile Val Lys Gln	Lys Tyr 1520 Glu Ile 1535 Gly Thr  Val Lys Lys Gln Asn Thr 1600 Glu Leu 1615 Pro Gly  Lys Glu Ser Leu Gln Gln 1680 Leu His 1695

			1700	)				1709	5				1710	)	
505	Т1	λαπ			Tan	Len	Lvc			Glu	Δla	Leu		_	Glu
261	IYL			Lys	Leu	neu	1720		БуЗ	O.L.	niu	1725		014	0
		1719			_	_			•		0			G3	774 -
Leu	Asn	Ser	Cys	Val	Asp			Ala	гуs	Ser			Leu	GIU	HIS
	1730					1735					1740				
Arg	Ile	Ala	Thr	Met	Lys	Gln	Glu	Gln	Lys	Ser	Trp	Glu	His	Gln	Ser
1749					1750					1755					1760
Ala	Ser	Leu	Lys	Thr	Gln	Leu	Val	Ala	Ser	Gln	Glu	Lys	Val	Gln	Asn
			-	1765					1770					1775	
T.em	Glu	Asn	Thr			Asn	Val	Asn	Leu	Gln	Met	Ser	Arg	Met	Lvs
200			1780		<b></b>			1785					1790		•
C	7	D~0			The	cln	Cln			Glu	בומ	T.011			Glu
Ser	ASP		_	var	1111	GIII			шуз	GIU	AIU	1809		GIII	GIU
		1799			_		1800		•		11-1			0	
Val			Leu	His	Lys			GIn	Asn	Ser			гуѕ	ser	Trp
	1810					1819					1820		_		
Ala	Pro	Glu	Ile	Alg	Thr	His	Pro	Ser	Gly	Leu	His	Asn	Gln	Gln	Lys
1825					1830					1835					1840
Arg	Leu	Ser	Trp	Asp	Lys	Leu	Asp	His	Leu	Met	Asn	Glu	Glu	Gln	Gln
_			_	1845			_		1850					185	
Leu	Len	Trn	Gln	Glu	Asn	Glu	Ara	Leu	Gln	Thr	Met	Val	Gln	Asn	Thr
204			1860				5	1869					1870		
T	27.5	C1			uic	C0~	7~~			Val	Δrα	Gln			Ser
ьys	Ald			Int	HIS	261			цуз	var	nr 9	188		Jiu	501
_		1879		_	'	~3	1880		•	<b>1</b>	D			mb	Mob
Asn			Pro	Lys	His			HIS	Leu	Asn			GLY	III	Mec
	1890					1899	5				1900	)			
														_	
Asn	Pro	Thr	Glu	Gln	Glu	Lys	Leu	Ser	Leu	Lys	Arg	Glu	Cys	Asp	Gln
190	5				1910	)				191	5				1920
190	5				1910	)					5				1920
190	5				1910 Ser	)				1919 Lys	5				1920 Asn
1905 Phe	5 Gln	Lys	Glu	Gln 1925	1910 Ser	) Pro	Ala	Asn	Arg 1930	1919 Lys )	Val	Ser	Gln	Met 193	1920 Asn 5
1905 Phe	5 Gln	Lys	Glu Gln	Gln 1925 Glu	1910 Ser	) Pro	Ala	Asn	Arg 1930 His	1919 Lys	Val	Ser	Gln	Met 1935 Gly	1920 Asn 5
1905 Phe Ser	Gln Leu	Lys Glu	Glu Gln 1940	Gln 1925 Glu	191( Ser 5 Leu	Pro Glu	Ala Thr	Asn Ile 194	Arg 1930 His	1919 Lys ) Leu	Val Glu	Ser Asn	Glu 1950	Met 193! Gly	1920 Asn 5 Leu
1905 Phe Ser	Gln Leu	Lys Glu Lys	Glu Gln 1940 Gln	Gln 1925 Glu	191( Ser 5 Leu	Pro Glu	Ala Thr Asp	Asn Ile 1949 Glu	Arg 1930 His	1919 Lys )	Val Glu	Ser Asn Glu	Glu 1950 Met	Met 193! Gly	1920 Asn 5 Leu
1905 Phe Ser Lys	Gln Leu Lys	Lys Glu Lys 195	Glu Gln 1940 Gln	Gln 1925 Glu ) Val	1910 Ser Leu Lys	Pro Glu Leu	Ala Thr Asp	Asn Ile 194! Glu	Arg 1930 His Gln	1919 Lys ) Leu Leu	Val Glu Met	Ser Asn Glu 1969	Gln Glu 1950 Met	Met 193! Gly O Gln	1920 Asn 5 Leu His
1905 Phe Ser Lys	Gln Leu Lys Arg	Lys Glu Lys 1959 Ser	Glu Gln 1940 Gln	Gln 1925 Glu ) Val	1910 Ser Leu Lys	Pro Glu Leu Pro	Ala Thr Asp 1960 Ser	Asn Ile 194! Glu	Arg 1930 His Gln	1919 Lys ) Leu	Val Glu Met His	Ser Asn Glu 1969 Ala	Gln Glu 1950 Met	Met 193! Gly O Gln	1920 Asn 5 Leu His
1909 Phe Ser Lys Leu	Gln Leu Lys Arg 1970	Lys Glu Lys 1959 Ser	Glu Gln 1940 Gln Thr	Gln 1925 Glu ) Val Ala	1910 Ser Leu Lys Thr	Pro Glu Leu Pro 1975	Ala Thr Asp 1960 Ser	Asn Ile 194! Glu ) Pro	Arg 1930 His Gln Ser	1919 Lys Leu Leu Pro	Val Glu Met His	Ser Asn Glu 1969 Ala	Glu 1950 Met Trp	Met 193! Gly O Gln Asp	1920 Asn 5 Leu His
1909 Phe Ser Lys Leu	Gln Leu Lys Arg 1970	Lys Glu Lys 1959 Ser	Glu Gln 1940 Gln Thr	Gln 1925 Glu ) Val Ala	1910 Ser Leu Lys Thr	Pro Glu Leu Pro 1975	Ala Thr Asp 1960 Ser	Asn Ile 194! Glu ) Pro	Arg 1930 His Gln Ser	Lys Lys Leu Leu Pro	Val Glu Met His 1980 Pro	Ser Asn Glu 1969 Ala	Glu 1950 Met Trp	Met 193! Gly O Gln Asp	1920 Asn 5 Leu His Leu
1909 Phe Ser Lys Leu Gln 1989	Gln Leu Lys Arg 1970 Leu	Lys Glu Lys 1955 Ser	Glu Gln 1940 Gln Thr	Gln 1925 Glu Val Ala	Leu Lys Thr	Pro Glu Leu Pro 1975	Ala Thr Asp 1960 Ser Cys	Asn Ile 194! Glu Pro	Arg 1930 His Gln Ser	Lys Leu Leu Pro Val	Val Glu Met His 1980 Pro	Ser Asn Glu 1969 Ala O Arg	Glu 1950 Met Trp	Met 193! Gly Gln Asp	1920 Asn 5 Leu His Leu Phe 2000
1909 Phe Ser Lys Leu Gln 1989	Gln Leu Lys Arg 1970 Leu	Lys Glu Lys 1955 Ser	Glu Gln 1940 Gln Thr	Gln 1925 Glu Val Ala	Leu Lys Thr	Pro Glu Leu Pro 1975	Ala Thr Asp 1960 Ser Cys	Asn Ile 194! Glu Pro	Arg 1930 His Gln Ser	Lys Lys Leu Leu Pro	Val Glu Met His 1980 Pro	Ser Asn Glu 1969 Ala O Arg	Glu 1950 Met Trp	Met 193! Gly Gln Asp Gln	1920 Asn 5 Leu His Leu Phe 2000
Phe Ser Lys Leu Gln 1989 Leu	Gln Leu Lys Arg 1970 Leu Gln	Lys Glu Lys 195! Ser Leu Leu	Glu Gln 1940 Gln Thr Gln Gln	Gln 1925 Glu Val Ala Gln Arg 2005	Lys Thr Gln 1990	Pro Glu Leu Pro 1979 Ala Leu	Ala Thr Asp 1960 Ser Cys Leu	Asn Ile 194! Glu Pro Pro	Arg 1930 His Gln Ser Met Ala 2010	Lys Leu Leu Pro Val 1999 Glu	Val Glu Met His 1980 Pro Arg	Ser Asn Glu 1969 Ala Arg	Glu 1956 Met Trp Glu	Met 193! Gly Gln Asp Gln Gln 201!	1920 Asn 5 Leu His Leu Phe 2000 His
Phe Ser Lys Leu Gln 1989 Leu	Gln Leu Lys Arg 1970 Leu Gln	Lys Glu Lys 195! Ser Leu Leu	Glu Gln 1940 Gln Thr Gln Gln	Gln 1925 Glu Val Ala Gln Arg 2005	Lys Thr Gln 1990	Pro Glu Leu Pro 1979 Ala Leu	Ala Thr Asp 1960 Ser Cys Leu	Asn Ile 194! Glu Pro Pro	Arg 1930 His Gln Ser Met Ala 2010	Lys Leu Leu Pro Val 1999 Glu	Val Glu Met His 1980 Pro Arg	Ser Asn Glu 1969 Ala Arg	Glu 1956 Met Trp Glu	Met 193! Gly Gln Asp Gln Gln 201!	1920 Asn 5 Leu His Leu Phe 2000 His
Phe Ser Lys Leu Gln 1989 Leu	Gln Leu Lys Arg 1970 Leu Gln	Lys Glu Lys 195! Ser Leu Leu	Glu Gln 1940 Gln Thr Gln Gln	Gln 1925 Glu Val Ala Gln Arg 2005 Leu	Lys Thr Gln 1990	Pro Glu Leu Pro 1979 Ala Leu	Ala Thr Asp 1960 Ser Cys Leu	Asn Ile 194! Glu Pro Pro	Arg 1930 His Gln Ser Met Ala 2010 Ser	Lys Leu Leu Pro Val 1999 Glu	Val Glu Met His 1980 Pro Arg	Ser Asn Glu 1969 Ala Arg	Glu 1956 Met Trp Glu	Met 1939 Gly Gln Asp Gln Gln 2019	1920 Asn 5 Leu His Leu Phe 2000
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170

165

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Pro Arg Gln Pro Ser Leu Met Gly Pro Glu Ser Gln Ser Pro Asp Cys
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Lys Asp Gly Ala Ala Ala Thr Gly Ala Thr Ala Thr Pro Ser Ala Gly
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Asn Pro Arg Gln Tyr Gln Ile Pro Ser Arg Asn Val Pro Ser Ala Arg
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Thr Thr Ala Thr Pro Thr Ile Met Lys Gln Gly Arg Gln Asn Leu Trp
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Phe Ala Asn Pro Gly Gly Ser Asn Ser Met Pro Ser Arg Thr His Ser
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Ser Val Gln Arg Thr Arg Ser Leu Pro Val His Thr Ser Pro Gln Asn
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Met Leu Met Phe Gln Gln Pro Glu Phe Gln Leu Pro Val Thr Glu Pro
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120

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Leu Ile Arg Gln Tyr Asp Leu Arg Glu Asn Ser Lys His Ser Glu Val
Leu Ile Asp Leu Thr Glu Tyr Cys Gly Gln Leu Val Glu Ala Lys Cys
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Leu Thr Val Asn Pro Gln Asp Asn Asn Cys Leu Ala Val Gly Ala Ser
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Gly Pro Phe Val Arg Leu Tyr Asp Ile Arg Met Ile His Asn His Arg
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Lys Ser Met Lys Gln Ser Pro Ser Ala Gly Val His Thr Phe Cys Asp
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Arg Gln Lys Pro Leu Pro Asp Gly Ala Ala Gln Tyr Tyr Val Ala Gly
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His Leu Pro Val Lys Leu Pro Asp Tyr Asn Asn Arg Leu Arg Val Leu
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Val Ala Thr Tyr Val Thr Phe Ser Pro Asn Gly Thr Glu Leu Leu Val
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Asn Met Gly Gly Glu Gln Val Tyr Leu Phe Asp Leu Thr Tyr Lys Gln
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Arg Pro Tyr Thr Phe Leu Leu Pro Arg Lys Cys His Ser Ser Gly Glu
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Val Gln Asn Gly Lys Met Ser Thr Asn Gly Val Ser Asn Gly Val Ser
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Asn Gly Leu His Leu His Ser Asn Gly Phe Arg Leu Pro Glu Ser Arg
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Gly His Val Ser Pro Gln Val Glu Leu Pro Pro Tyr Leu Glu Arg Val
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Lys Gln Gln Ala Asn Glu Ala Phe Ala Cys Gln Gln Trp Thr Gln Ala
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Asp His Tyr Asp Ala Leu Arg Asp Cys Leu Lys Ala Ile Ser Leu Asn
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Pro Cys His Leu Lys Ala His Phe Arg Leu Ala Arg Cys Leu Phe Glu
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Leu Lys Tyr Val Ala Glu Ala Leu Glu Cys Leu Asp Asp Phe Lys Gly
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Lys Phe Pro Glu Gln Ala His Ser Ser Ala Cys Asp Ala Leu Gly Arg
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His Arg Gly Leu Gly Val His Leu Ser Phe Val Arg Ser Val Thr Met
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Asp Lys Trp Lys Asp Ile Glu Leu Glu Lys Met Lys Ala Gly Gly Asn
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Ala Lys Phe Arg Glu Phe Leu Glu Ser Gln Glu Asp Tyr Asp Pro Cys
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                85
Trp Ser Leu Gln Glu Lys Tyr Asn Ser Arg Ala Ala Ala Leu Phe Arg
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Asp Lys Val Val Ala Leu Ala Glu Gly Arg Glu Trp Ser Leu Glu Ser
Ser Pro Ala Gln Asn Trp Thr Pro Pro Gln Pro Arg Thr Leu Pro Ser
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Met Val His Arg
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Gly Leu Lys Gly Ala Gln Glu Arg Ile Asp Ser Leu Arg Arg Thr Gly
Val Ile His Glu Lys Gln Thr Ala Val Ser Val Glu Asn Phe Ile Ala
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Glu Leu Leu Pro Asp Lys Trp Phe Asp Ile Gly Cys Leu Val Val Glu
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Asp Pro Val His Gly Ile His Leu Glu Thr Phe Thr Gln Ala Thr Pro
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Val Pro Leu Glu Phe Val Gln Gln Ala Gln Ser Leu Thr Pro Gln Asp
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Tyr Asn Leu Arg Trp Ser Gly Leu Leu Val Thr Val Gly Glu Val Leu
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Glu Lys Ser Leu Leu Asn Val Ser Arg Thr Asp Trp His Met Ala Phe
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## <213> Homo sapiens

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Ser Pro Ala Leu Gln Asp Leu Gln Ala Thr Glu Ala Asn Cys Thr Val
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Leu Ser Val Gln Gln Ile Gly Glu Val Phe Glu Cys Thr Phe Thr Cys
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Gly Ala Asp Cys Arg Gly Thr Ser Gln Tyr Pro Cys Val Gln Val Tyr
Val Asn Asn Ser Glu Ser Asn Ser Arg Ala Leu Leu His Ser Asp Glu
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His Gln Leu Leu Thr Asn Pro Lys Cys Ser Tyr Ile Pro Pro Cys Lys
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Arg Glu Asn Gln Lys Asn Leu Glu Ser Val Met Asn Trp Gln Gln Tyr
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Trp Lys Asp Glu Ile Gly Ser Gln Pro Phe Thr Cys Tyr Phe Asn Gln
His Gln Arg Pro Asp Asp Val Leu Leu His Arg Thr His Asp Glu Ile
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Val Leu Leu His Cys Phe Leu Trp Pro Leu Val Thr Phe Val Val Gly
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600

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Asp Trp Ser Val Pro Ser Pro Pro Thr Ala Ser Gln Asp Ser Gly Val
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Gln Ser Pro Pro Gly Ala Ser Arg Asp Trp Ser Val Pro Ser Pro Pro
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Arg Ala Tyr Gln Asp
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Gly Pro Phe Pro Pro Gly Arg Glu Thr Ser Arg Pro Ala Pro His Thr
Thr Ala Lys Arg Gly Leu Ser His Leu Glu Arg Asn Phe Gln Thr Ser
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Pro Ser His His Ser Gln Glu Gly Pro Phe Pro Pro Gly Glu Lys Leu
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Gly Cys Phe Ala Cys Val Ser Lys Pro Pro Ala Leu Gln Ala Pro Ala
Ala Pro Ala Pro Glu Pro Ser Ala Ser Pro Pro Met Ala Pro Thr Leu
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Phe Pro Met Glu Ser Lys Ser Ser Lys Thr Asp Ser Val Arg Ala Ala
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Gly Ala Pro Pro Ala Cys Lys His Leu Ala Glu Lys Lys Thr Met Thr
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Asn Pro Thr Thr Val Ile Glu Val Tyr Pro Asp Thr Thr Glu Val Asn
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Cys Leu Gly Phe Ile Ala Leu Ala Tyr Ser Leu Lys Val Arg Asp Lys
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                                        155
Lys Leu Leu Asn Asp Leu Asn Gly Ala Val Glu Asp Ala Lys Thr Ala
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Arg Leu Phe Asn Ile Thr Ser Ser Ala Leu Ala Ala Ser Cys Ile Ile
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Leu Val Phe Ile Phe Leu Arg Tyr Pro Leu Thr Asp Tyr
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Ile Cys Thr Arg Thr Val Gln His Gln Asp Ser Gln Val Asn Ala Leu
Glu Val Thr Pro Asp Arg Ser Met Ile Ala Ala Val Gln Pro Val
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Ser Leu Gly Tyr Gln His Ile Arg Met Tyr Asp Leu Asn Ser Asn Asn
Pro Asn Pro Ile Ile Ser Tyr Asp Gly Val Asn Lys Asn Ile Ala Ser
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Val Gly Phe His Glu Asp Gly Arg Trp Met Tyr Thr Gly Gly Glu Asp
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Cys Thr Ala Arg Ile Trp Asp Leu Arg Ser Arg Asn Leu Gln Cys Gln
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Arq Ile Phe Gln Val Asn Ala Pro Ile Asn Cys Val Cys Leu His Pro
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Asn Gln Ala Glu Leu Ile Val Gly Asp Gln Ser Gly Ala Ile His Ile
Trp Asp Leu Lys Thr Asp His Asn Glu Gln Leu Ile Pro Glu Pro Glu
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Val Ser Ile Thr Ser Ala His Ile Asp Pro Asp Ala Ser Tyr Met Ala
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Ala Val Asn Ser Thr Gly Asn Cys Tyr Val Trp Asn Leu Thr Gly Gly
                            200
Ile Gly Asp Glu Val Thr Gln Leu Ile Pro Lys Thr Lys Ile Pro Ala
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His Thr Arg Tyr Ala Leu Gln Cys Arg Phe Ser Pro Asp Ser Thr Leu
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Leu Ala Thr Cys Ser Ala Asp Gln Thr Cys Lys Ile Trp Arg Thr Ser
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Asn Phe Ser Leu Met Thr Glu Leu Ser Ile Lys Ser Gly Asn Pro Gly
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Glu Ser Ser Arg Gly Trp Met Trp Gly Cys Ala Phe Ser Gly Asp Ser
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Gln Tyr Ile Val Thr Ala Ser Ser Asp Asn Leu Ala Arg Leu Trp Cys
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Arg Gln Gln Ala Pro Gly Pro Gln Gln Ala Pro Gly Pro Arg Gln Pro
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Thr Ile Leu Glu
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Pro Asp Lys Thr Trp Val Lys Lys Gly Glu Pro Leu Pro Val Lys Leu
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